



Department of Consumer & Industry Services Kathleen M. Wilbur, Director

MEMORANDUM

DATE: August 21, 2000

TO: Interested Parties

FROM: Frank M. Fitzgerald

Commissioner of the Office of Financial and Insurance Services

SUBJECT: Final Report and Certification Regarding the State of Competition in the

Workers' Compensation Insurance Market and Commercial Liability

Insurance Market

Pursuant to Public Act 8 of 1982 and Public Act 318 of 1986, I am submitting a consolidated final report on the state of compensation in the workers' compensation insurance market and the commercial liability insurance market. The analyses and economic tests of data performed since publication of the preliminary reports (workers' compensation on January 14, 2000 and commercial liability on February 18, 2000) indicate that there have been no substantive changes in the results of such analyses and economic tests. Accordingly, I am adopting the above-referenced preliminary reports as the final reports on the state of competition in the workers' compensation and commercial liability insurance markets.

I am also submitting my certification as to the presence of workable competition in the commercial liability insurance market and the workers' compensation insurance market.

CERTIFICATION OF THE STATE OF COMPETITION IN THE

WORKERS' COMPENSATION INSURANCE MARKET

I hereby certify that, based on the results of the economic tests specified in MCLA 500.2409, a reasonable degree of competition exists at this time in the Michigan workers' compensation insurance market.

Frank M. Fitzgerald

Commissioner of the Office of Financial and

Frank M. Forgerald

Insurance Services

DATE: __August 23, 2000_____



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MEMORANDUM

DATE: January 14, 2000

TO: Interested Parties

FROM: Frank M. Fitzgerald

Commissioner of Insurance

SUBJECT: Preliminary Report and Certification Regarding the

State of Competition in the Workers' Compensation Insurance Market

Attached is a copy of the preliminary report on the state of competition in the workers' compensation insurance market and my certification as to the presence of workable competition in the market during 1999.

This report and certification were prepared in accordance with the requirements of Section 2409 of the Insurance Code, MCLA 500.2409.

Attachment

STATE OF MICHIGAN DEPARTMENT OF CONSUMER & INDUSTRY SERVICES INSURANCE BUREAU

PRELIMINARY REPORT ON THE STATE OF COMPETITION IN THE WORKERS' COMPENSATION INSURANCE MARKET

By: Frank M. Fitzgerald Commissioner of Insurance

Dated: January 15, 2000

TABLE OF CONTENTS

	<u> </u>	Page
	Executive Summary	ii
I.	Background	1
II.	Market Structure	6
III.	Market Conduct	14
IV.	Market Performance	16
V.	Conclusion	45
	Appendix - Section 2409 of Public Act 8 of 1982	46
	Certification	48

EXECUTIVE SUMMARY

Pursuant to Public Act 8 of 1982, this preliminary report reviews and determines the state of competition in the workers' compensation insurance market in Michigan for 1999. Its purpose is to determine if the open competitive rating system has allowed adequate competition to keep workers' compensation insurance available at premium levels which are not excessive, inadequate nor unfairly discriminatory. Generally accepted economic tests were used to determine whether current market structure, conduct and performance are conducive to workable competition.

Based on analysis of the data used in this report, the market structure is conducive to workable competition. No single company or group of companies controls the market. More than 100 insurer groups are operating in Michigan. Concentration in the market has been stable or declining since 1986 and is not at a level of concern. Market structure data show an insurance line that has low concentration. Concentration as measured by the top four, eight and twenty insurers and the more sophisticated Hershmann-Herfindahl indices all indicate an unconcentrated market. Producers are continually entering and exiting the market creating a healthy turnover of competitors.

The Compensation Advisory Organization of Michigan (CAOM) testified at a public hearing held on November 17, 1999 and provided evidence that competition exists in the workers' compensation market. They indicated that 1999 is the sixth year in a row all measures of market share in the assigned risk facility are down. CAOM asserted that the assigned risk facility continues to be dominated by a few unique firms that have classifications with expensive federally mandated benefits and/or dangerous occupations. They provided several additional indicators of competition: low industry concentration, no carrier with greater than a 15 percent market share, declining manual and standard rates, significant disparity in observed rates and increases in the numbers of carriers writing in the market.

Market conduct data show that there is significant variation in rates within classifications which suggests that rates are not being fixed. Employers should be able to improve their insurance costs by shopping around. Average rate levels have been declining considerably since 1991, even in the face of reduced profitability in the market in 1991 and 1992. This was partially due to increasing use of large deductible policies. Since 1994 rate levels have fallen due to competitive pressures with rates declining more in 1996 than in any year since the initiation of competition. Rates continued to fall through the end of 1999. Although pure premiums indications for 2000 are down 2.7 percent, filed rates to-date in 2000 have been mixed with increases and decreases. Thus, 2000 could be a turning point for this soft market.

Even with these tremendous competitive pressures, measures of insurer profitability have been high the last five years. Insurers= loss ratios for the period 1994 to 1998 are at the lowest level since 1982. The ratios could be low due to increased profitability or to optimism over the expected costs of incurred claims. However, loss ratios are most probably low due to the release of reserves as a result of better than anticipated loss experience for older claims due to lower than expected indemnity and medical costs. The ability of insurers to continue to lower prices based upon monies available from the release of reserves cannot continue indefinitely.

The National Association of Insurance Commissioners' measures of insurer profitability are also quite high for the period 1994 to 1997. Their report for 1998 has not arrived as of this date. The

NAIC profitability numbers use loss ratios as a basis. As a result, the profitability numbers could be high for the same reasons loss ratios are low. Since 1994 there has been a string of low loss ratios beginning with 59.6 percent, trending to a low of 45.6 percent in 1997 and rising to 61.5 percent in 1998. Profits on insurance transactions has analogously been high, starting with 22.5 percent in 1994, hitting a high at 27.6 percent in 1995 and falling off to 25.4 and 23.2 percent in 1996 and 1997 respectively. Based on the latest rate filings market prices may have stabilized, perhaps as the result of the trend toward lower profits.

Impact of the Underwriting Cycle

The data on market conditions indicate that the workers' compensation insurance market has continued its softening phase through the end of 1999. The most recent hard market phase of 1990 to 1991, while allowing a restoration of insurer profitability, was mild compared to the unusually hard market of 1985 to 1987. Overall, average rates paid by employers rose 11, 15 and 7 percent in the earlier hard market and were up only two and 3 percent in the latter. Indicators of improved profitability, including statewide loss ratios and profit on insurance transaction ratios in 1993, were precursors of the softer turn in the insurance underwriting cycle.

Premium rates responded as insurers competed for market share, evidenced by a downward trend in premium rate filings starting in 1994. Overall, average premium rates paid have trended downward since 1991 through the end of 1999. An end to the softer phase of the cycle could occur when excess reserves are depleted and insurers' must maintain rates to adequate to cover current anticipated claims costs without the cushion of released reserves.

As mentioned earlier, measures of insurance availability have been improving in each of the last six years, paralleling the softening market data with respect to rates. Participation in the placement facility increased after 1990 and peaked in 1992. The 1993 and subsequent data show that efforts to depopulate the facility have been generally effective although less so for smaller businesses.

Data on the distribution of rates show a variation in the manual rates paid by employers in the same classification. Since 1992, rate disparities have tended to decrease with a reduction in the difference between high and low rates. However, it appears that rates have become more evenly disbursed between the highs and lows. This variation suggests that some businesses may pay a higher premium for their insurance than necessary and that many employers could save on premiums were they to shop more. Price comparisons are available from insurance agencies at no cost other than the effort to obtain bids. We have observed that the open competitive environment has allowed employers who shop for coverage to find competitively priced insurance.

Conclusions

The overall evidence indicates that there is a reasonable degree of competition in the Michigan workers' compensation insurance market. The current pattern of rate decreases and decreased assigned risk business indicates continued softening of the market in 1999. In spite of rate decreases, insurers= profitability has improved significantly. Despite decreased overall assigned risk business, smaller businesses have not reduced their assigned risk participation as much as larger ones. For these reasons, the Bureau will continue monitoring rate levels and insurance availability as well as rate adequacy and insurer solvency.

I. BACKGROUND

In 1982, the Legislature passed Public Acts 7 and 8, which established a competitive regulatory environment for workers' compensation insurance. These acts rely on price competition as the principal regulator of rates. The legislation creates and maintains market conditions conducive to competition by:

- (1) Allowing insurers to file rates and use them without first receiving approval from the insurance commissioner.
- (2) Prohibiting cartel rate filings and abolishing rating bureaus.
- (3) Allowing insurers to share only untrended loss cost information needed to make pricing decisions.
- (4) Prohibiting insurers from requiring the purchase of other types of insurance as a condition for obtaining workers' compensation insurance.

This approach to regulation requires monitoring the degree of competition in workers' compensation insurance markets to ensure that it is sufficient to prevent prices from rising above the level necessary to provide a fair rate of return on investment to cost efficient insurers. The legislation directs the commissioner to annually evaluate the state of competition using relevant economic tests.

Theory of Competition

According to economic theory, an industry is perfectly competitive only when the number of firms selling a homogeneous commodity is so large, and each individual firm's share of the market is so small, that no individual firm is able to affect the price of the commodity. In addition, perfect competition requires that there be no barriers to the entry of new firms and that resources be perfectly mobile in and out of the industry. Buyers and sellers must be fully informed about market conditions.

The long-run equilibrium outcome of a competitive market possesses three desirable properties. The following properties imply that a competitive market will obtain an optimal allocation of resources:

- (1) The cost of producing the last unit of output -- the marginal cost -- is equal to the price paid by consumers for that unit.
- (2) AExcess" profits will be absent. Investors will receive a return just sufficient to induce them to maintain their investment at the level required to produce the industry's equilibrium output efficiently.

(3) Each firm will be producing at an output level where its average cost will be at a minimum.

Of course, the conditions for perfect competition are ideal. We would never expect to find these conditions completely satisfied in the real world. For this reason, the concept of workable competition has been developed as a standard by which we evaluate actual markets. A market could be considered workably competitive when it reasonably approaches the structural, conduct, and performance characteristics of perfect competition. It is workable competition which we expect to be present in the workers' compensation insurance market.

Market structure encompasses the number of buyers and sellers and their size distribution, the height of barriers to entry into the market, cost structures, the character of buyer and seller information, and the degree of product differentiation. Market conduct covers the actual behavior of firms in pricing, setting output levels, product design, advertising, innovation, and capital investment. Market performance refers to price, profit, and output levels, the degree of cost efficiency, and the rate of technological progress.

While the above conditions for perfect and workable competition are stated in static terms, the underwriting cycle is also an important factor in the short-term performance of the property and liability insurance industry. The cycle is characterized by successive periods of increasing and diminishing competition. Competitive or "soft" markets are characterized by falling rates, increased availability, growing loss ratios, and diminished surplus. These conditions eventually force loss ratios to critical levels causing insurers to raise their rates and reduce their volume, which ultimately restores their profitability and their surplus. This situation then spurs another round of price cutting which perpetuates the cycle.

Current data indicate that this market has been experiencing the softer phase of the underwriting cycle. This soft market is reflected several ways. The pure premium indications for 1995 through the year 2000 are negative. Rate filings since 1994 have almost all been for decreases. However, rate filings for 2000 have been mixed between increases and decreases – indicative, perhaps of the end of market softening. Average observed premium rates have fallen since 1992. All measures of overall market share of the assigned risk facility are down each year since 1993. These positive results follow a five-year period of improved insurer profitability as measured by loss ratios in 1993 through 1998 and by profits on insurance transactions from 1993 to 1997.

Given the uncertainties of the underwriting cycle, the status of competition in the Michigan workers' compensation insurance market must be evaluated in a long-term context. Short-term increases in rate levels and profitability do not necessarily indicate a lack of competition if rates previously have not been sufficient to cover costs. A lack of competition would be indicated by a sustained period of excessive rates with no movement back to reasonable levels. The evidence in this report indicates that the market for workers' compensation insurance continues to suffer the swings of the underwriting cycle. After a relatively mild hard phase, the market began to soften in 1994 and has continued to be soft through 1999. Based on filed rates, the end to market softness could occur during 2000. Competition has resulted in lowered rates subsequent to improvements in insurer profitability. It has be found that premium rates have been neither

excessive nor inadequate since the beginning of more open competition in 1982.

Statutory Criteria for Competition

Under Section 2409(3) of the Insurance Code, the commissioner must use the following economic tests in making a determination about the state of competition in the workers' compensation insurance market:

- (a) The extent to which any insurer controls all or a portion of the worker's compensation insurance market. With respect to competition on a statewide basis, an insurer shall not be considered to control the worker's compensation insurance market unless it has more than a 15% market share. In making a determination under this subdivision, the commissioner shall use all insurers in this state, including self-insurers, group self-insurers as defined in chapter 65, and insurers writing risks under the placement facility created in chapter 23 as a base for calculating market share.
- (b) Whether the total number of companies writing workers' compensation insurance in Michigan is sufficient to provide multiple options to employers.
- (c) The disparity among workers' compensation insurance rates and classifications to the extent that such classifications result in rate differentials.
- (d) The availability of workers' compensation insurance to employers in all geographic areas and all types of businesses.
- (e) The residual market share.
- (f) The overall rate level, which is to be not excessive, inadequate or unfairly discriminatory.
- (g) Any other factors the commissioner considers relevant.

Discussion of the Amended Section 2409(3)(a)

The inclusion of the self-insured market and the assigned risk market is both conceptually and empirically problematic. With respect to the 15 percent market share measure for the current report there is no measure of premiums for self-insurers. Therefore, it is not possible to calculate the amended market share measure.

In all previous editions of this report and in this current report, the concentration measures do not contain an adjustment to take into account the segment of the market which is self-insured. The economic study of markets requires information on both buyers and sellers who participate in such markets. If the price of a good or service is too high relative to a buyer's demand schedule he or she will not purchase in the market.

This will occur in any market as potential buyers will seek either cheaper substitutes or produce the product or service themselves.

For example, individuals may wish to purchase the check writing privileges banks provide. If the cost of writing checks is too high, individuals will either write fewer checks or avoid buying this service. They may opt instead to carry more cash in their pockets for transaction purposes. When examining the market for banking services for the market power that higher concentration may allow, the fact that individuals are carrying more cash is not a consideration which would reduce the regulator's concern. Rather, the fact that individuals are carrying more money may be indicative that the price for banking services is too high because the excessive concentration of banking services allows bankers to raise the price of banking services above the price that the service is worth to prospective customers.

The banking example is analogous to what might occur in the insurance market. A greater share of the market going to self-insurance could be indicative of a perception by insureds that premiums are too high. These perceptions could be mistaken if the reason for the high prices is the high cost of resolving liability claims that is not realized by those opting for self- insurance. The perception that premiums are too high could also be due to realized market inefficiencies. Employers opting to self-insure take the risk of not only having incorrect perceptions with regard to costs, but also of being forced into the placement facility if they return to the insurance market. Notwithstanding these risks, a significant number of employers are currently self-insured. Whether perceptions about high premiums are right or wrong, a greater share going to self-insurance does not bode well for competition.

This logic leads us to the conclusion that when the concentration of an insurance market is being examined, self-insurance should be left out of the calculations.

For similar reasons, the assigned risks associated with the placement facility should probably be excluded from market concentration measures used for regulatory purposes. Premiums for such assigned business are predetermined by formula, the business is reinsured and purchasing decisions are made by the assignment of 16 and two-thirds percent of premium to each of the six assigned risk carriers. Therefore, such placement facility business has little or no connection with the voluntary insurance market for workers' compensation.

The problems associated with the amendments to Section 2409(3)(a) leave the Bureau in a quandary as to how to interpret what it must do with respect to this concentration measure. Inasmuch as the 15 percent figure was somewhat arbitrarily chosen in the first place, the Legislature could have simply raised the figure to a higher level. The only figures available to the Bureau with respect to self-insureds are indemnity losses (no medical losses) that are reported by self-insurers to the Bureau of Workers=Disability Compensation, the number of companies self-insured, and estimates of the number of employees covered. If the concentration limit of 15 percent were simply raised by the proportion of indemnity losses attributable to self-insureds, 42-43 percent in recent years, then the limit would be raised to 21 or 22 percent. It is suggested that the Legislature amend Section 2409(3)(a) to return it to the former language, substituting 21 or 22 percent for the 15 percent limit.

In the absence of some acceptable measure of self-insureds or guiding legislation, the Bureau will utilize the market share measure as one indicator of competition that in and of itself is not a sufficient condition for a finding of market control.

Regulatory Criteria for Competition

In addition to these tests in MCLA 500.2409, standards for judging the adequacy of competition are also contained in Administrative Rule 500.1205(2) which provides that a determination regarding the existence of a reasonable degree of competition must give due consideration to all of the following:

- (a) The relevant market for the coverage or the type of insurance to which the rate applies.
- (b) The number of insurers and the number of self-insurers actively engaged in writing or providing the coverage or type of insurance in the relevant market.
- (c) The distribution of rates and market shares for such insurers in the relevant market. Market shares may be measured either by premiums or exposures.
- (d) Past and prospective trends in the availability of coverage and coverage options for insurance of that type in the relevant market.
- (e) Profits attributable to insurance of that type in relation to the profitability of other types of insurance, to the uncertainty of loss for that and other types of insurance, and to the amount of capital and surplus funds available to support premium writings for that and other types of insurance.
- (f) The ability and potential for firms to enter and exit the relevant market and for financial capital and surplus funds to be allocated to and to be removed from the relevant market.

This is the seventeenth preliminary commissioner's report on the state of competition in the workers-compensation insurance market as required by the Public Act 8 of 1982. The final reports for 1992 and 1993 noted evidence of a harder market, but noted that the underwriting cycle had not swung as severely as in the 1985-1987 period. Final reports for 1993 through 1998 provided evidence of market softening. All these reports indicated that premium rates did not rise excessively in hard markets and that insurance availability has been excellent. All previous reports have concluded that the workers' compensation insurance market is reasonably competitive.

The data used in this report comes primarily from reports provided to the commissioner by the designated advisory organization, the Compensation Advisory Organization of Michigan (CAOM), as required by R 500.1359. A public hearing addressing the issue of competition in the workers' compensation insurance market was held on November 17, 1999. Information and testimony gathered from that hearing was also

used in preparing this report.

The remainder of the report is organized into four sections. The first section analyzes market structure. The second and third sections examine market conduct and performance respectively. Each section will evaluate whether current conditions are consistent with what one would expect to find in a workably competitive market. The final section provides conclusions with respect to the status of competition.

II. MARKET STRUCTURE

The first two economic tests for competition contained in MCLA 500.2409(3) deal with market structure. For calendar years since 1995, they are:

- (a) The extent to which any insurer controls all or a portion of the worker's compensation insurance market. With respect to competition on a statewide basis, an insurer shall not be considered to control the worker's compensation insurance market unless it has more than a 15% market share. In making a determination under this subdivision, the commissioner shall use all insurers in this state, including self-insurers, group self-insurers as defined in chapter 65, and insurers writing risks under the placement facility created in chapter 23 as a base for calculating market share.
- (b) Whether the total number of companies writing workers' compensation insurance in this state is sufficient to provide multiple options to employers.

Size and Number of Insurers

Exhibits 1(a) and 1(b) identify the thirty leading workers' compensation insurance carriers and affiliated insurer groups for calendar year 1999 and show their market shares in terms of written premium for the even years 1982 through 1998. Insurer group market shares are evaluated here because they are more relevant when assessing competition since carriers within a group are under common control and hence are not likely to compete with each other.

Exhibits 1(a) and 1(b) from this and prior reports reveal that no company or group had a market share in excess of 15 percent in any year other than 1989, 1990, and 1993. Variable time lags

¹Market shares for 1999 are based on total estimated annual premium as provided by CAOM. Market shares based on total estimated annual premium may vary from those based on either final audited premium or premium reported on page 14 of the annual statement.

Exhibit 1(a) Voluntary Market Shares for the 30 Leading Carriers*

<u> 1982 - 1999</u>

	Premiums	Market		_					~.			
	Written		Market			_					dar Ye	
<u>Carrier Names</u>	<u>1999*</u>	<u>1999</u>	<u>Shares</u>	<u>1998</u>	<u>1996</u>	<u>1994</u>	<u>1992</u>	<u>1990</u>	<u>1988</u>	<u>1986</u>	<u>1984</u>	<u>1982</u>
Accident Fund of Michigan	89,804	14.18	14.18	11.6	12.2	14.3	14.6	16.9	14.5	13.2	5.1	3.4
Citizens Insurance Co of Am	51,308	8.10	22.28	7.2	8.5	9.7	9.8	8.1	7.7	6.1	3.6	4.0
Frankenmuth Mutual Ins Co	28,089	4.44	26.72	3.5	3.4	3.3	2.0	1.1	1.3	1.1	0.7	0.5
Auto-Owners Insurance Co	18,845	2.98	29.70	2.8	3.3	2.8	2.2	1.5	1.6	1.2	1.1	1.3
Liberty Mutual Fire Ins Co	18,214	2.88	32.58	3.6	3.9	5.2	6.8	7.0	8.5	8.6	6.8	6.3
Amerisure Insurance Co	15,940	2.52	35.10	2.8	2.3	2.0	2.0	1.8	1.5	1.1	1.7	1.8
Valley Forge Insurance Co	14,720	2.32	37.42	2.7	1.1	0.0	0.1	0.0	0.0	0.1	0.1	0.2
Hastings Mutual Insurance Co	14,269	2.25	39.67	2.0	1.8	2.0	1.8	1.2	0.7	0.6	0.6	0.7
Cincinnati Casualty Company	10,008	1.58	41.25	1.4	1.2	1.1	0.7	0.2	-	-	-	-
Transcontinental Insurance Co	9,362	1.48	42.73	1.8	2.4	1.9	1.0	1.0	0.8	0.2	0.8	0.2
Firemans Fund Insurance Co	9,058	1.43	44.16	1.2	0.8	0.6	0.2	0.0	0.1	0.2	0.6	0.4
Farm Bureau Gen Ins Co of MI	8,564	1.35	45.51	1.3	1.3	1.3	-	-	-	-	-	-
Fremont Casualty Ins Co	7,432	1.17	46.68	0.9	-	-	-	-	-	-	-	-
Connecticut Indemnity Co	7,068	1.12	47.80	1.4	0.6	0.3	0.4	0.0	0.1	0.0	-	-
American Comp Ins Co	7,048	1.11	48.91	1.1	-	-	-	-	-	-	-	-
Lake States Insurance Co	6,787	1.07	49.98	1.1	1.5	1.0	0.5	-	0.2	0.0		
American States Insurance Co	6,552	1.03	51.01	0.8	0.8	0.8	1.1	1.1	1.0	0.6	0.5	0.4
MI Physicians Mutual Liab Co	6,371	1.01	52.02	0.8	0.2	0.0	-	-	-	-	-	-
Phoenix Insurance Company	6,342	1.00	53.02	1.0	0.5	0.1	-	0.0	0.1	0.0	0.0	0.1
Legion Insurance Company	6,328	1.00	54.02	0.7	0.6	0.3	0.1	0.3	0.1	-	-	-
Fremont Indemnity Company	6,059	0.96	54.98	0.9	1.5	0.0	-	-	0.0	-	-	-
Insurance Co of the State of PA	5,970	0.94	55.92	2.2	1.8	0.7	0.5	0.2	0.7	0.5	0.1	0.1
Westfield Insurance Company	5,816	0.92	56.84	0.9	0.8	0.6	0.4	0.2	0.1	0.1	0.2	0.2
Michigan Mutual Insurance Co	5,666	0.89	57.73	1.2	2.1	2.7	2.8	3.1	3.8	4.3	5.9	4.6
Liberty Insurance Corporation	5,521	0.87	58.60	1.0	0.9	1.0	0.8	0.6	1.0	1.4	0.1	-
State Farm Fire & Casualty Co	5,164	0.82	59.42	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.4	0.4
Star Insurance Company	5,133	0.81	60.23	0.8	0.9	0.9	1.0	0.5	0.5	0.4	-	-
Fremont Compensation Ins Co	5,009	0.79	61.02	0.0	-	-	-	-	-	-	-	-
American Home Assurance Co	5,001	0.79	61.81	0.2	0.3	0.1	0.1	0.0	0.1	0.1	0.0	0.0
Farm Bureau Mut Ins Co of MI	4,860	0.77	62.58	0.8	0.7	0.6	1.7	1.0	0.8	0.8	0.8	0.9

^{*1999} data through October 17, 1999, premium data in \$1,000s.

1982 - 1997 market shares based on standard premium obtained from unit statistical reports or policy declarations filed by insurers.

1998 - 1999 market shares based on standard premium obtained from policy declarations filed by insurers.

Exhibit 1(b)

Voluntary Market Shares for the 30 Leading Groups*

<u>1982 - 1999</u>

	Premiums	Market							~ .			
	Written		Market					are For				
<u>Group Names</u>	<u>1999*</u>	<u>1999</u>	Shares	1998	<u> 1996</u>	<u>1994</u>	<u>1992</u>	<u>1990</u>	<u>1988</u>	<u>1986</u>	<u>1984</u>	<u>1982</u>
Accident Fund of Michigan	89,804	14.18	14.18	11.6	12.2	14.3	14.6	16.9	14.5	13.2	5.1	3.4
Allmerica Group	51,633	8.15	22.33	7.3	8.6	9.8	9.9	8.2	7.8	6.1	3.6	4.1
CNA Insurance Group	36,632	5.78	28.11	6.6	6.3	6.5	5.2	6.0	6.7	4.7	4.4	3.9
Liberty Mutual Insurance Cos	29,559	4.67	32.78	5.7	5.7	7.0	8.5	7.9	9.9	10.4	7.3	7.0
Frankenmuth Mutual Ins Co	28,089	4.44	37.22	3.5	3.4	3.3	2.0	1.1	1.3	1.1	0.7	0.5
Auto-Owners Group	23,087	3.65	40.87	3.2	3.3	2.8	3 2.2	2 1.5	1.6	1.2	1.1	1.3
Amerisure Companies	21,607	3.41	44.28	4.0	4.3	4.8	4.8	4.9	5.3	5.4	7.6	6.4
Travelers Ins Group	18,898	2.98	47.26	3.9	1.9	2.4	1.6	2.6	2.7	3.6	4.9	5.1
American Int'l Group	17,989	2.83	50.09	3.6	3.4	1.9	3.8	4.9	3.4	2.7	1.6	0.3
William Life Ins Group	17,029	2.69	52.78	2.2	0.8	0.8	0.5	0.2	0.3	0.2	0.3	0.2
Hartford Fire & Cas Group	16,614	2.63	55.41	2.7	2.3	2.8	2.8	3 4.3	3.5	4.1	4.3	3.5
Fireman's Fund Group	15,025	2.37	57.78	2.1	1.7	1.7	1.8	0.9	0.7	0.8	3.3	3.3
Fremont General Group	14,901	2.35	60.13	2.4	1.5	0.0	0.0	0.0	0.0	-	-	-
Orion Group, Inc	14,697	2.32	62.45	2.6	1.6	1.2	0.4	0.0	0.1	0.0	0.0	0.0
Hastings Mutual Ins Comp	14,269	2.25	64.70	2.0	1.8	2.0	1.8	1.2	0.7	0.6	0.6	0.7
Cincinnati Financial CP	14,101	2.23	66.93	1.9	1.6	1.4	1.0	0.6	0.6	0.6	0.4	0.2
Michigan Farm Bureau	13,424	2.12	69.05	2.1	1.9	1.9	1.7	1.0	0.8	0.8	0.8	0.9
Nationwide Corporation	11,517	1.82	70.87	2.2	2.0	2.2	2.5	2.4	3.0	4.0	0.2	0.5
Kemper Insurance Co Group	11,447	1.80	72.67	2.2	2.2	1.7	3.4	3.6	2.4	1.9	1.7	2.5
Zurich-American Ins Cos	11,339	1.78	74.45	3.4	3.2	2.1	1.7	1.6	1.7	0.9	1.9	1.9
Chubb & Son Inc	10,301	1.63	76.08	2.3	1.9	1.3	1.2	0.9	0.8	1.5	1.1	0.5
St. Paul Companies	9,730	1.54	77.62	0.9	0.8	0.6	0.9	0.8	0.5	0.7	1.6	1.1
Reliance Group, Inc	9,703	1.53	79.15	1.4	1.3	1.3	1.0	1.5	1.0	0.6	1.0	0.8
Westfield Companies	7,222	1.14	80.29	1.1	0.9	0.8	0.7	0.3	0.2	0.2	0.3	0.3
American Comp Ins Grp	7,048	1.11	81.40	1.1			. ,	-	-	-	-	-
American Community Group	6,787	1.07	82.47	1.1	1.5	1.0	0.5	0.0	0.2	0.0	-	-
MI Physicians Mutual Liab	6,371	1.01	83.48	0.8	0.2	0.0) .		-	-	-	-
Legion Insurance Company	6,328	1.00	84.48	0.7	0.6	0.3	0.1	0.3	0.1	-	-	-
Netherlands Ins Companies	5,204	0.82	85.30	0.8	0.8	1.0	1.2	2 1.1	1.1	0.8	0.8	0.5
State Farm - IL	5,164	0.82	86.12	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.5	0.4

^{*1999} data through October 17, 1999, premium data in \$1,000s.

1982 - 1997 market shares based on standard premium obtained from unit statistical reports or policy declarations filed by insurers.

1998 - 1999 market shares based on standard premium obtained from policy declarations filed by insurers.

between companies in reporting data to CAOM result in biases in measures of market concentration. Larger, local insurers, especially The Accident Fund, tend to report data much more quickly. The ultimate share of The Accident Fund exceeded 15 percent in 1989, 1990, and 1993, but The Accident Fund had been explicitly exempted from the 15 percent statutory limit on any one company's share through to its point of sale, which was at the end of 1994.

In earlier years the Fund's ultimate market share has typically retreated several points from preliminary estimated levels to fall below 15 percent when the final figures are determined. Over the period from 1990 to 1993 preliminary Fund figures were estimated to be 21.7, 20.5, 18.3, and 18.8 percent respectively. The corresponding final numbers were determined to be 16.9, 14.5, 14.6, and 15.1 percent, indicating an average retreat of 4.6 percent. As expected the Fund's market shares in 1994 and 1995 which, on a preliminary basis, were 18.5 and 16.9 percent respectively, retreated back to less than the 15 percent market share using the market share of premium measure.

A review of market share data shows that between 1989 and 1999, Michigan domiciled insurers expanded their market shares. Michigan based companies had five positions of the top twenty insurance companies in 1989 and peaked with ten in 1995 and currently have nine in the 1999 data. Michigan based carriers in the top twenty expanded their market share by 7.4 percent from 1989 to 1999, from 30.5 to 37.9 percent. The Accident Fund has continued to be the largest insurer.

Given this evidence, it may be asserted that no insurer controls the workers' compensation insurance market according to the criterion contained in MCLA 500.2409(3).

Although higher concentration is generally associated with less competition, neither economic theory nor experience, establish a critical level of concentration for the inhibition of competition or the onset of oligopoly in any particular industry. Exhibit 2 presents concentration ratios or the combined market shares for the top four, eight, and twenty carriers and groups for 1980 through 1999. There was a gradual rising trend in these concentration measures from 1982 through 1990. Company and group data subsequent to 1990 show a trend of decreasing concentration through 1998. The preliminary data show a small increase in these measures in 1999. Generally accepted economic analysis would consider the group data in Exhibit 2 to portray a relatively unconcentrated market probably not subject to oligopolistic behavior. Besides concentration measures, evaluators must also review other tests and statistics prior to concluding that monopolistic behavior exists.

The merger guidelines used by the U.S. Justice Department employ a more sophisticated concentration measure called the Herfindahl-Hirschman Index or "H-Index." The H-Index is calculated by squaring the market share of each firm within an industry and summing across all firms. An important characteristic of the H-Index is that, by squaring the market share of each firm, it weighs larger sellers more heavily. To provide some perspective, an industry with 100 firms, each with a 1 percent share of the market, would generate an H-Index value of 100 while an industry with only one seller would generate the maximum possible H-Index value of 10,000. Under the Justice Department guidelines, a market with an H-Index of less than 1,000 is considered to be unconcentrated and merger in such a market is unlikely to encounter opposition. A market with an H-Index of between 1,000 and 1,800 is considered to be moderately concentrated, but

other evidence of restricted competition would be necessary before a merger in such a market would be opposed.

Exhibit 2
Combined Market Shares

1980 - 1999

	Market Share Top 4		Market Sha	re Top 8	Market Share Top 20		
Year	<u>Company</u>	Group	Company	Group	<u>Company</u>	Group	
1980	21.3	25.6	33.4	43.1	56.3	72.8	
1981	21.9	25.8	34.6	43.2	57.2	74.1	
1982	18.8	23.6	31.1	41.2	54.1	67.7	
1983	19.3	24.6	32.2	42.3	53.3	67.1	
1984	21.8	25.5	33.7	43.2	51.7	69.8	
1985	24.9	29.4	35.7	47.5	56.0	73.9	
1986	32.2	35.2	42.8	52.2	61.0	77.1	
1987	34.9	37.3	45.3	54.6	61.1	77.5	
1988	34.8	38.7	45.4	54.4	62.5	76.9	
1989	34.1	37.9	44.3	53.4	62.6	75.7	
1990	36.6	39.1	49.9	57.8	67.7	79.9	
1991	36.4	38.6	49.7	56.6	67.2	78.8	
1992	35.2	38.2	46.3	54.4	63.8	75.8	
1993	33.6	37.0	43.6	53.0	60.7	75.7	
1994	32.6	37.7	43.4	54.9	59.6	75.0	
1995	30.6	34.0	41.8	49.7	59.1	75.6	
1996	28.1	33.1	39.5	50.0	57.2	75.4	
1997	26.8	32.3	37.4	46.8	54.1	75.1	
1998	25.9	31.2	36.4	46.1	52.9	75.3	
1999	29.7	32.8	39.7	47.3	54.0	74.5	

1980-81 market shares based on manual premium obtained from unit statistical reports filed by insurers.

Source of Data: Compensation Advisory Organization of Michigan

Exhibit 3 presents H-Index values for the Michigan workers' compensation insurance industry calculated on both an individual carrier and group basis for 1980 through 1999. The highest value on the exhibit of 601.3 for groups in 1990 is only 60 percent of the minimum level that the Justice Department has established for "moderate" concentration. This figure includes the share of The Accident Fund which is almost solely responsible for the jump in the H-index for groups from 1982 through 1990. The H-Index grew over 8 percent per year from 326.5 in 1982 to 546.0 in 1987, leveled off for two years, peaked again in 1990 and trended downward through 1998. Again, the preliminary data for 1999 show a small increases in

¹⁹⁸²⁻⁹⁷ market shares based on standard premium obtained from unit statistical reports or policy declarations filed by insurers.

¹⁹⁹⁸⁻⁹⁹ market shares based on total estimated annual premium obtained from policy declarations filed by insurers.

concentration.

The increases of market concentration caused some concern as the concentration peaked in 1990. Most of the changes in concentration can be explained by the changes in the market share held by

Exhibit 3 Herfindahl - Hirschman Index* <u> 1980 - 1999</u>

	Company 1	H-Index	Group H-	Group H-Index		
<u>Year</u>	With A-Fund	l W/O A-Fund	With A-Fund	W/O A-Fund		
1980	228.6	NA	347.5	NA		
1981	238.1	NA	359.8	NA		
1982	212.3	215.2	326.5	337.5		
1983	208.4	208.5	355.3	368.1		
1984	219.1	214.8	353.0	363.2		
1985	265.6	215.6	399.9	379.3		
1986	381.5	274.1	502.2	434.4		
1987	438.4	308.6	546.0	456.2		
1988	433.2	306.7	540.8	453.7		
1989	437.5	291.5	533.4	424.4		
1990	510.3	325.3	601.3	457.1		
1991	467.4	350.9	553.7	469.0		
1992	448.5	322.2	538.1	445.1		
1993	437.0	288.6	522.5	407.3		
1994	411.7	280.7	512.4	418.0		
1995	371.2	267.7	477.3	407.8		
1996	331.7	236.4	452.6	393.3		
1997	304.7	207.5	425.1	364.8		
1998	287.1	195.3	407.6	351.2		
1999	360.9	216.9	453.9	346.1		
Where:		And:				

H-Index = $\sum_{i=1}^{n} S_i^2$ $\sum_{i=1}^{n} S_i$ S_i is the i'th company's or group's share of market premiums in percentage terms. n is number of companies or groups.

1980-81 market shares based on manual premium obtained from unit statistical reports filed by insurers. 1982-97 market shares based on standard premium obtained from unit statistical reports filed by insurers. 1998-99 market shares based on total estimated annual premium obtained from policy declarations filed by insurers. Source of Data: Compensation Advisory Organization of Michigan

The Accident Fund. The H-Indices presented in Exhibit 3 without The Accident Fund (A-Fund) show slowly rising concentration levels through 1987 and somewhat steady to diminishing levels subsequent to 1987. Since 1991, the Accident Fund's market share receded each year, probably due to the 37 percent rate increase in 1991 and increases in subsequent years through 1995 (see Exhibit 6). Rate decreases in 1996 and 1997 have allowed the Fund to arrest their decline in market share.

A review of preliminary data in Exhibit 4 indicates that 112 groups and 241 companies wrote workers' compensation insurance in 1999. Considering the data, these numbers indicate that employers had numerous options in terms of sources of workers' compensation insurance. There had been some concern about the trend in the number of insurers in the market. In 1982, there were 115 groups with 231 individual carriers. By 1986, the numbers had shrunk to 100 groups and 225 carriers. This shakeout of competitors is not surprising considering the contraction in the commercial insurance market in 1985 and 1986. After bottoming out in 1990, changes have been upward trending and the number of carriers has surpassed the number in 1982 each year since 1995. This has occurred in spite of the trend toward consolidation of insurance groups over the last few years.

Even though no one insurer is large enough to control the Michigan workers' compensation insurance market independently and there are numerous insurers overall, there is still the question of whether the industry is concentrated enough among the leading companies to enable them to use price collusion or otherwise limit their competition.

The evidence would appear to support the view that competition has increased due to the softening phase of the underwriting cycle. Furthermore, decreasing concentration in the workers' compensation insurance market alleviates most concerns about the competitiveness of the market. However, other factors to be examined could adversely affect competitive behavior.

Exit and Entry

Workable competition requires relatively low barriers to entry into the market. Entry into the Michigan workers' compensation insurance market would seem to be relatively easy. Studies suggest that entry barriers into the property-liability insurance industry generally are not high. The physical facilities needed to produce insurance are not considerable and economies of scale appear to be moderate given the availability of a cheap and reliable source of loss cost information. This means that small carriers can be relatively cost competitive with larger carriers. The initial investment required for an insurer to begin operations in a particular state is not inordinately burdensome. Insurers can also use the same facilities to market several lines of insurance which makes it easier to enter any particular line.

In practice, it is difficult to quantify precisely the height of entry barriers. We can, however, obtain some indication about entry barriers and competition from the actual rate of entry and exit. It is reasonable to expect a fair level of entry into and exit out of the workers' compensation insurance market if there is workable competition. Aggressive competition would tend to result in a shake-out of less efficient firms while low entry barriers would make it easy for new firms to come into the market. Growth in demand will

also encourage entry.

Exit and entry data for groups in the Michigan workers' compensation insurance market are shown in Exhibit 4. Rates of exit and entry are measured as a percentage of the previous year's groups. There was significant concern for the effect on market concentration of the downward trend in the number of insurance groups from 1982 to 1986. From 1990 to 1998 the number of carriers and groups in the market has been trending upward, in spite of several group mergers. The preliminary data, which can be biased on the low side, show a small decline in the numbers of companies and groups in 1999. The number of new entrants into the market provides evidence that the barriers to doing business in Michigan must not be significant enough to bar entry.

Exhibit 4
Exit and Entry by Groups
1982 - 1999

	<u>En</u>	<u>trie</u> s	Exits		Net	<u>Change</u>	<u>Groups</u>	Carriers
<u>Year</u>	Number	Percent*	Number	Percent*	Number	Percent*	Number	Number
1982							115	231
1983	3	2.6%	7	6.1%	-4	-3.5%	111	232
1984	5	4.5%	4	3.6%	1	0.9%	112	239
1985	3	2.7%	7	6.3%	-4	-3.6%	108	233
1986	4	3.7%	12	11.1%	-8	-7.4%	100	225
1987	6	6.0%	3	3.0%	3	3.0%	103	236
1988	4	3.9%	4	3.9%	0	0.0%	103	232
1989	1	1.0%	2	1.9%	-1	-1.0%	102	227
1990	3	2.9%	6	5.9%	-3	-2.9%	99	225
1991	7	7.1%	3	3.0%	4	4.0%	103	229
1992	5	4.9%	2	1.9%	3	2.9%	106	234
1993	3	2.8%	5	4.7%	-2	-1.9%	104	228
1994	4	3.8%	5	4.8%	-1	-1.0%	103	230
1995	3	2.9%	4	3.9%	-1	-1.0%	102	237
1996	10	9.8%	6	5.9%	4	3.9%	106	236
1997	11	10.3%	6	5.6%	5	4.7%	112	247
1998	11	9.8%	5	4.5%	6	5.4%	118	247
1999	2	1.7%	8	6.8%	-6	-5.1%	112	241

^{*} Percent of previous year's groups.

Source of Data: Compensation Advisory Organization of Michigan

^{1980 - 81} market shares based on manual premium obtained from unit statistical reports filed by insurers.

^{1982 - 97} market shares based on standard premium obtained from unit statistical reports and policy declarations filed by insurers.

^{1998 - 99} market shares based on total estimated annual premium obtained from policy declarations filed by insurers.

The figures in Exhibit 4 reveal a fair amount of entry into and exit out of the industry since 1982. On the whole, the data show that there is three fewer insurer groups operating in the market in 1999 than in 1982, the last year before open competition. Declines in the number of insurers and groups occurred between the initiation of competition and the bottom of the underwriting cycle in 1986. Since the low point in 1990 there has been an upward trend in groups in spite of diminished insurer profitability in 1990 through 1992 (to be discussed in Section IV). Thus, the overall exit and entry pattern would be consistent with low entry barriers and workable competition.

Considering all these factors, the structure of the workers' compensation insurance market in Michigan generally appears to be conducive to competition. With regard to the structural tests for competition contained in MCLA 500.2409(3), through 1989 no company or group, including The Accident Fund, possessed a share of the market in excess of 15 percent for a full year and there are enough insurers to provide multiple options to employers. The Fund's share exceeded 15 percent in 1989, 1990, and 1993. However, the Fund=s market share in 1994 through 1998 was less than the 15 percent and has been on a downward trend since 1990. Overall, the level of concentration is low enough to permit a reasonable degree of competition and the level of entry into the market is consistent with a reasonable degree of competition.

Subsequent sections examine whether the industry's conduct and performance follow a competitive pattern.

III. MARKET CONDUCT

According to the structure-conduct-performance hypothesis, a competitive market structure should result in competitive conduct on the part of sellers. Firms behave competitively when they independently and aggressively seek business by offering the most favorable terms to buyers that they can profitably present. Competitive conduct is not cooperative behavior aimed at restricting output and fixing prices to raise profits.

If workers' compensation insurers are behaving competitively, we should see no evidence of rate fixing or other kinds of agreements or concerted action designed to limit competition. Instead, we should see evidence that insurers are independently and aggressively seeking business by offering the lowest rates possible for the kind of coverage and services they are providing.

Testimony given at the public hearing held by the Insurance Bureau on November 17, 1999, and submitted in writing generally indicates that the competition in the marketplace has been maintained over the last year. The information from the last few years suggests the market is in an extended period of the soft phase of the underwriting cycle. Over the last six years the data shown in Exhibit 6 (page 21) indicate filed rates are retreating, although a few insurers have increased their manual rates minimally over the last couple of years. Premium rates as presented in Exhibit 7 (pages 23-24), were generally level from 1987 to 1989, rose to a peak in 1991 and have subsequently fallen each year. Actual data from 1995 through 1999 for manual rates show that several major players in the market will be following the downward direction in pure premiums for

these years presented in Exhibit 8 (page 26). Additionally, increased use of large deductible policies and premium discounts have further reduced premiums actually paid.

Testimony from the Compensation Advisory Organization of Michigan

The only person to provide oral and written testimony was Mr. Jon Heikkinnen, Vice President of the Compensation Advisory Organization of Michigan (CAOM). Mr. Heikkinnen presented the year-to-date industry data that the Data Collection Agency contracts with the CAOM to obtain. He noted that his statistical comparisons were with year-to-mid-October data from prior years. His testimony highlighted data supporting the CAOM contention that competition exists in the workers' compensation market:

- 1. Comparing year-to-date (through October 17th) data for 1999, estimated to be 82 percent complete, he noted that while voluntary market payroll was up over a billion dollars or about 3 percent, estimated annual premiums decreased by \$41 million. Because of the increased payroll and decreased premiums, average premium rates per \$100 payroll has decreased over the last year by 12 cents to \$1.21.
- 2. Comparing similar data, he mentioned that all indicators of facility market share were down in 1999. The residual market count of policies is down by 1,500, the amount of premium written is down 11 percent and the amount of payroll is down 7 percent. This significant downward trend in all facility participation statistics has now lasted six years.
- 3. Mr. Heikkinners testimony was that the residual market continues to be dominated by classifications that are high risk classifications with federally mandated benefits combined with high risk occupations, e.g., Admiralty codes. The number of classifications where the average assigned risk rate was less than the average voluntary rate, while remaining quite low, has increased from eight in 1998 to eleven in 1999.
- 4. As further evidence of competition, Mr. Heikkinnen testified that no company had a market share of more than 15 percent. He added that the number of actively writing carriers increased by six, to 241. The exhibits also showed a significant variation in rates, implying that insurers were not conspiring to fix prices.
- 5. The testimony highlighted the fact that the classifications with the highest percentage of payroll in the assigned risk facility were those that were unique business types. The CAOM exhibits demonstrated the fact that over the last several years there has been a down trend in policies assigned by the facility indicating improving availability.

Given this information the Compensation Advisory Organization of Michigan concluded that competition exists in the marketplace.

Discussion of Market Conduct

The evidence on market conduct indicates the stability of overall rates from 1987 to 1989 yielded to small overall increases from 1990 to 1993. Rates have been downward trending subsequent to 1993. Competition for customers has not only led to decreasing premiums, but also a lessening of the restrictiveness of underwriting practices. This will become apparent in the next section. Insurers have contended that price competition is strong as evidenced by the loss of accounts to competitors, diminishing profit margins and the significant disparity in rates.

The rate increases of the 1990 to 1993 period led to the return to insurer profitability and improved surplus positions (to be discussed in detail below) and is now showing a positive impact on availability. The amount of policies, payroll and premiums in the assigned risk facility has declined each year since 1992. Over the last few years the Bureau has not encountered any employers who have been unable to obtain quotes for insurance because of tightened availability or more stringent underwriting practices.

The lack of participation by employers in the hearing process provides some evidence that workers' compensation insurance has not been a problem over the last year. No firm testified that it was seeking coverage but having trouble finding an insurer. The Bureau has received few complaints, but this may be due in part to the efforts of the Bureau of Workers Disability Compensation and the Michigan Jobs Commission in providing information and advice regarding workers' compensation insurance.

The variation in premium rates within classifications as presented in Exhibit 5 is indicative that insurers are not price-fixing premium rates. The variation in premium rates means that employers should continue to be able to avoid paying larger premiums by shopping around. Based on the evidence on market conduct, it would appear that insurance is reasonably available and that there is no indication that insurers= market conduct is not competitive.

IV. MARKET PERFORMANCE

According to economic theory, a competitive market will achieve an optimal allocation of resources. Specifically, this means that the market price will equal the cost of the last unit of output, each firm will produce at a level of output where its average cost is at a minimum, and investors will receive a rate of return just equal to the cost of capital. In effect, a competitive market structure causes firms to behave competitively, which in turn leads to "good" market performance. If the Michigan workers' compensation insurance market is workably competitive, its performance should reasonably approach that which would be achieved under perfect competition.

The remaining tests for competition specified in MCLA 500.2409(3) fall within the scope of market performance. Again, they are:

(c) The disparity among workers' compensation insurance rates and classifications to the extent that such classifications result in rate differentials.

- (d) The availability of workers' compensation insurance to employers in all geographic areas and all types of business.
- (e) The residual market share.
- (f) The overall rate level which is not excessive, inadequate or unfairly discriminatory.

In response to these areas of concern, the remainder of this section will cover in order: the variation in rates, the level of rates, the profitability of insurers and the availability of insurance.

Variation in Manual Rates

Data was obtained on the distribution of manual rates actually charged on policies written in the 100 largest classifications, on the basis of payroll in 1999. Exhibit 5 shows the lowest rate charged, the highest rate charged, and the percentage of policies written at rates in each of five equal divisions between the low and the high rates. For example, for a classification with a low rate of \$5.00 and a high rate of \$10.00, range 1 would include policies written at rates from \$5.00 to \$6.00, range 2 would cover policies written at rates from \$6.00 to \$7.00, etc.

Although the pattern of distribution revealed in Exhibit 5 is generally skewed towards lower rates, it is apparent that a considerable number of policies are still purchased at rates significantly exceeding the lowest rate. On average, 79 percent of all policies were written at rates within the lowest three divisions of the respective classifications. Most policies, 64 percent, were written at rates in the lower-middle and middle ranges. The skewness toward <u>lower</u> rates has been diminishing since 1995. However the mode of policies remains in the lower-middle range. Rates have become less centralized in the distribution with a more even dispersion of rates since 1995.

From a review of Exhibit 5, it is apparent that considerable variation in pricing has continued since the introduction of open competitive rating in 1983. This clearly shows that the previous practice of uniform pricing has not continued under open competition. At the same time, however, the fact that employers with similar operations have continued to pay such a variety of prices is a matter of some concern. In the long run, competition should cause prices for a homogeneous commodity to converge around a level just sufficient to enable an efficiently run company to earn a fair return on investment. Here it appears to be the case that for any given classification some employers are paying much higher manual rates than others.

There are several possible explanations for this variation of prices, which would not imply market failure. It is possible that variances in manual rates among carriers are substantially offset by differences in policies toward schedule credits, experience rating, premium discounts, and other rating adjustments.

Exhibit 5

Distribution of Policies by Manual Rates - 1999

Percentage of Policies											
Class Class	Number of	High	Low	By Range (Low to High)							
Code Description	Policies	Rate	Rate	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>			
11 Farm-Mkt or Truck	1,609	6.30	2.49	62	31	3	3	1			
42 Landscape Gardening	2,674	10.04	4.01	9	43	35	13	0			
129 Dairy/Livstck Farm	1,530	11.72	4.25	51	29	7	11	2			
2003 Bakeries	483	7.50	2.82	4	19	41	33	4			
2157 Beverage Mfg	16	17.25	3.51	81	6	0	6	6			
2501 Misc Sewing Mfg	235	8.05	3.75	20	37	24	16	3			
2790 Pattern/Shoe Mfg	241	2.99	1.07	17	37	23	17	5			
2812 Cabinet Mfg	409	7.51	2.12	8	68	15	3	6			
2881 WoodenGoodsAsmbly	270	6.86	2.16	44	40	7	3	6			
3076 Metal Goods Assmbly	429	5.46	2.08	3	24	43	26	5			
3096 Tool Mfg	597	4.59	1.87	15	15	52	14	5			
3113 Tool Mfg-NOC	289	5.10	2.31	16	54	16	14	0			
3116 Tool Mfg DiesJigsFx	401	4.78	1.90	8	24	48	15	5			
3131 Button&Fastener Mfg	88	7.00	2.25	22	52	22	2	2			
3145 Screw Mach Pro Mfg	175	6.14	2.29	6	22	47	15	10			
3146 Hdw Mfg-NOC	297	8.36	2.48	7	39	35	13	6			
3179 Elec App Mfg-NOC	294	6.19	2.63	24	38	26	9	3			
3400 MetalGoods Mfg-NOC	200	15.27	4.51	15	51	32	2	1			
3628 Machinery Mfg NOC	644	4.90	1.95	3	23	35	35	4			
3629 Mach Parts Mfg-NOC	917	3.92	1.66	1	31	48	16	4			
3632 Machine Shop-NOC	852	8.57	1.50	0	11	48	23	18			
3643 Elec Pwr Equip Mfg	192	5.86	2.22	23	29	29	13	6			
3681 Tele/Elc-ApprtsMfg	124	6.04	1.93	37	46	7	3	6			
3685 Instr Mfg-NOC	193	3.10	1.32	5	23	24	39	10			
3724 Apparatus Installtn	774	13.76	5.62	3	16	39	28	14			
3807 Auto Radiator Mfg	12	5.86	4.05	33	33	25	0	8			
3808 Auto Mfg or Assmbly	66	9.24	4.25	23	24	18	20	15			
4239 Fiber Goods Mfg	24	6.61	3.25	17	13	38	25	8			
4299 Printing	974	5.00	1.78	7	36	42	13	2			
4361 Photographer	393	1.79	0.68	6	23	46	10	15			
4410 Rubber Goods Mfg	103	9.61	3.48	9	25	19	42	5			
4459 Plastics Mfg-Basic	136	6.61	3.08	15	26	29	20	10			
4484 Molded Plastics Mfg	403	10.91	2.93	18	39	30	11	2			
4511 Analytical Chemist	1,058	2.30	0.73	5	27	41	11	16			
4611 Drug & Rx Preparation	91	2.19	1.00	12	27	29	18	14			
4829 Acid Mfg	36	5.29	0.62	61	3	6	6	25			
5022 Masonry Erection	1,128	30.46	8.50	22	77	1	0	0			
5183 Plumbing Instl&Serv	2,087	8.96	3.62	11	51	33	4				
5190 Elec Wiring Instltn	2,037	6.55	2.52	28	36	29	2	0 5			
5191 Office Mach Instl	2,030 1,419	2.57	0.88	3	38	44	8	7			
5221 ConcreteWork Floors				55	36 44		0	0			
	2,086	19.09 26.75	6.71 7.90		72	1 9	0	0			
5403 Carpentry -NOC	1,017 2,082		4.25	19 3	24		9				
5437 Carpentry-finishwrk		11.22				63 52		1			
5445 Wallboard Instltn	874 1.762	12.25	5.07	2	11	52	32	3			
5476 Painting/Papering	1,762	19.14	7.93	12	77 10	9	2	0			
5538 ShtmtlWrkErctn-NOC	833	11.69	4.82	16	18	38	14	14			
5550 Heating & AC Instltn	694	9.92 5.07	4.76	69	27	3	2	0			
5606 ExecSupervsr Constr	2,040	5.07	1.81	4	35 56	44 25	17	0			
5645 Carpentry-Detached	5,475	16.69	6.98	2	56 40	35	7	0			
6217 Excavation-NOC	1,669	15.98	6.05	21	49	21	6	3			
Source of Data: Compensation	Advisory Orga	amzauon	oi michi	gan							

Exhibit 5 - Continued

Distribution of Policies by Manual Rates - 1999

				Pe	rcentag	e of Po	licies	
Class Class	Number of	High	Low		_	nge (Lo		High)
Code Description	Policies	Rate	Rate	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
6504 Processed Food Mfg	75	7.00	2.50	29	32	16	16	7
7208 Drivers - Trckng NOC	880	21.25	6.88	26	29	40	2	3
7219 Trckng NOC- No Drvr	327	19.75	5.82	15	59	14	3	9
7230 Parcel Delivery	22	9.09	4.24	23	18	9	0	50
7380 Drivers NOC	8,963	10.69	3.54	7	35	53	4	0
7600 Elec Line Stringing	214	8.15	2.51	10	38	40	10	2
7610 Radio/TV Bdcstng	312	1.18	0.38	3	30	38	20	9
7720 Police Officers	468	6.49	2.10	8	14	4	70	4
8006 Retail Grocery	1,130	5.03	1.79	7	33	58	2	0
8008 RetlClothing Store	1,017	1.93	0.73	5	27	51	14	3
8010 Hardware Store	3,280	2.87	0.95	5	50	37	7	1
8013 Store-Jewelry	465	0.98	0.40	8	42	29	17	4
8017 Retail Store-NOC	8,923	3.20	0.87	7	56	36	0	0
8018 WholesaleStore-NOC	896	8.37	2.76	5	34	40	19	2
8033 Supermarket	814	5.48	1.70	29	59	7	5	1
8039 Department Store	39	3.10	1.31	21	36	26	5	13
8044 Furniture Store	456	4.68	1.75	16	44	31	8	1
8059 Contract Packaging	235	8.31	2.80	31	27	13	24	5
8106 Iron/Steel Merchant	160	14.95	3.79	44	38	15	1	2
8107 Machine Dlr Oil Well	265	8.12	2.31	9	42	41	7	1
8227 Contractor's Yard	1,419	6.27	2.49	1	24	42	21	12
8232 Bldg Materials Yard	576	9.03	3.65	23	66	9	1	1
8292 Storage Warehouse	413	10.98	2.78	17	60	18	3	2
8387 Auto Serv Station	1,918	9.50	2.64	48	23	27	2	0
8393 Auto&Trck Body Shop	1,321	5.64	1.62	20	68	2	8	3
8395 Auto Repair Shop	4,696	7.11	2.25	1	52	37	8	2
8601 Survyr/Engnr/Archt	1,567	1.81	0.50	12	48	25	13	2
8742 Outside Sales	22,003	1.10	0.27	11	41	39	9	0
8748 AutoSales/Leasing	989	1.40	0.42	6	34	40	19	1
8755 Labor Union	283	1.43	0.30	9	79	4	8	0
8803 Auditors/Accts	1,229	0.38	0.09	9	41	28	21	1
8810 Office Clerks	67,222	0.56	0.16	12	33	14	39	1
8820 Attorney	1,837	0.64	0.10	26	51	6	10	6
8829 Nursing Home	158	9.03	3.34	21	47	29	1	2
8831 Animal Hosp&Grmng	816	2.36	1.06	30	14	40	14	2
8832 Physician	8,060	0.67	0.28	7	16	49	26	1
8833 Hospital Prof Emp	223	2.76	1.29	8	12	21	38	22
8835 Domstc&Nursg Servs	501	7.67	2.99	16	25	57	1	1
8868 Schl&Chrch ProEmpl	7,315	0.60	0.20	74	12	3	1	9
8901 Telephone Co - Office	50	0.94	0.28	40	26	14	12	8
9015 Janitorial Service	11,602	8.90	1.90	11	26	47	16	1
9052 Hotel Oth Empls	1,452	6.16	0.44	7	2	55	26	10
9058 Food Serv Wrkrs	8,447	4.19	1.25	5	54	35	1	6
9060 Prvt Club Empls	733	4.94	1.74	2	63	32	3	1
9061 Clubs-NOC	811	4.56	1.91	19	7	6	13	54
9101 Schl&Chrch Othr Emp	2,053	5.31	1.72	69	14	7	9	1
9403 Refuse Collection	105	21.26	7.93	8	30	12	8	42
9501 Paint Shop Only	369	11.45	2.78	20	42	30	7	1
9522 Upholstering Autos etc.	195	9.05	2.04	38	19	34	5	4
9586 BarberBeautyParlor	1,449	1.20	0.50	17	36	7	39	1
=	*							

Source of Data: Compensation Advisory Organization of Michigan

A second explanation for manual rate variances is that workers' compensation insurance is not an exactly homogeneous commodity. Carriers with higher rates may offer additional services that other carriers do not provide. Experience and schedule rating may also not fully accommodate insureds of varying risk. Hence, it is common for insurers to use preferred and standard carriers with different rates within the same group for this purpose. Lastly, some variation in pricing is not unexpected in a market that is continually subject to varying external forces that require adjustments by producers. The explanations above are not necessarily inconsistent with workable competition.

Rate Levels

Since the inception of competitive rating there has been perennial interest in changes in the overall rate level in the workers' compensation insurance market. The rate level was relatively easy to determine under the old system of uniform rating. Measurement of the rate level has become much more difficult under the new system where carriers set their own rates. It is possible to measure changes in the rate level in several different ways. Each approach provides somewhat different information about the market.

One approach is to measure the overall change in the manual rates charged by insurers in the various classifications. The overall manual rate level changes filed by each carrier can be averaged to approximate the overall manual rate level change for the market as a whole. This approach indicates movement in the "listed" or "posted" manual rate level. A survey of rate filings for the current top 20 carriers in Michigan since 1984 is shown in Exhibit 6. In the past, the Bureau tracked overall rate changes. Since it no longer does this, data has been taken from reports generated by a private firm, the M & R Group, which tracks workers' compensation rates.

The bottom two rows of averages pertain to the straight average of the current top 20 carriers and the straight average of the top 20 carriers as have been reported for each given year. Reviewing the bottom row, since the small decrease in 1988, there was a small increase in 1989 and a large 11.2 percent increase in 1990. The 1990 increase was the largest after 1985. Primarily a result of the 37.2 percent increase in The Accident Fund's rates, 1991 showed an average rate increase of 4.9 percent. Widespread increases in 1992 resulted in average annual increases of 7.1 percent. After 1992, rate increases began to moderate, falling to 6.9 percent in 1993 and 2.9 percent in 1994. In 1995 average filed rates began to fall with a 1.1 percent decrease. The average 9.8 percent decrease in 1996 was the largest since the initiation of competition. The downward trend in filed rates has continued in 1997, 1998 and 1999 with decreases of 5.7, 1.7 and 2.8 percent respectively. The rate filings to date for year 2000 could foretell the end of market softening as rate changes have been a mix of increases and decreases.

The 1990 increase appeared to be the result of insurers making use of the "indicated changes" in historical loss costs collected and published by the Data Collection Agency as a base for 1990 rate filings, to be further discussed below. The "indicated changes" were large in the 1990 publication to correct for large reporting errors in the 1989 indicated change. Had these errors not occurred, moderate increases would have replaced the decrease in 1989 and large increase in 1990 resulting

Exhibit 6
Survey of Rate Filing Changes For The Twenty Leading Carriers

The values indicate overall percentage changes filed for given years as of January 7, 1999; Source of data: Insurance Bureau and M&R Group

Manual Rate Survey Results	200	0 100	9 199) 100°	7 1996	5 199	5 1004	199	2 1002	1001	1000	1989	100	8 198′	7 1986	1005	1004	
Manual Rate Survey Results	<u>200</u>	<u>0</u> <u>199</u>	<u>9</u> 195	9 <u>8</u> 199′	<u> 1990</u>	<u> 199</u>	<u>5</u> <u>1994</u>	199	<u>3</u> <u>1992</u>	<u>1991</u>	<u>1990</u>	1965	<u>198</u>	<u> 198</u>	<u>/ 1980</u>	<u>1985</u>	<u>1984</u>	
TheAccident Fund	0.0%	1.8%	0.3%	-12.7%	-9.2%	2.2%	4.1%	5.0%	8.2%	37.2%	-8.0%	5.2%	0.0%	24.6%	19.6%	-2.8%	-11.0%	
Citizens Insurance Co of Am	0.0%	-0.6%	-1.5%	-8.7%	-6.4%	-14.9%	0.6%	6.3%	23.0%	6.4%	5.7%	0.0%	11.4%	9.5%	0.0%	9.6%	-7.4%	
Frankenmuth Mutual Ins	0.0%	-6.4%	-2.2%	-16.6%	0.2%	-5.4%	2.4%	6.7%	7.6%	8.3%	7.7%	9.2%	1.9%	3.0%	9.0%	4.6%	-2.5%	
Auto-Owners Insurance Co	0.0%	0.0%	0.0%	0.0%	-1.1%	-3.7%	2.6%	5.8%	6.5%	9.2%	12.8%	1.2%	0.0%	8.2%	6.5%	3.5%	5.0%	
Liberty Mutual Fire Ins Co	0.0%	-3.3%	-2.7%	-8.4%	-16.0%	-11.0%	-6.0%	17.0%	19.0%	5.0%	5.5%	5.0%	0.0%	11.0%	14.4%	0.0%	-4.7%	
Amerisure Insurance Co	0.0%	0.0%	-0.7%	-3.0%	0.0%	-13.3%	10.0%	10.0%	1.0%	7.1%	16.9%	4.0%	-4.4%	13.5%	0.0%	29.4%	-7.5%	
Valley Forge Insurance Co	0.0%	0.0%	2.2%	-6.0%	-16.8%	-3.8%	3.1%	0.0%	7.2%	9.9%	15.0%	8.8%	0.0%	3.3%	0.5%	26.5%	10.4%	
Hastings Mutual Ins Co	0.0%	-10.8%	0.1%	-5.8%	-9.3%	5.4%	4.7%	8.3%	12.9%	4.5%	16.6%	-4.2%	2.5%	5.7%	6.8%	4.2%	-14.5%	
Cincinnati Casualty Co	-1.5%	-2.7%	0.9%	-9.4%	-18.0%	0.0%	0.0%	10.3%	13.6%	12.0%	0.0%	0.0%	new					1
Transcontinental Inse Co	0.0%	0.0%	2.2%	-6.0%	-16.8%	-3.8%	3.1%	0.0%	7.2%	9.2%	15.0%	6.9%	0.0%	4.1%	15.4%	10.0%	-5.6%	,
Fireman's Fund Ins Co.	0.5%	-4.0%	-4.3%	-21.8%	-24.6%	-5.5%	7.2%	-8.2%	12.8%	0.0%	12.0%	0.0%	-8.0%	9.5%	14.6%	9.1%	2.4%	
Farm Bureau Genl I C of MI	-8.5%	-14.7%	-12.8%	0.0%	-9.0%	3.2%	2.2%	4.3%	18.0%	12.0%	6.4%	-1.8%	0.0%	0.0%	18.4%	1.0%	-12.2%	
Fremont Casualty Ins Co	0.0%	-4.0%	0.0%	new														
Connecticut Indemnity Co	0.0%	-0.7%	0.0%	-10.7%	-28.5%	5.4%	3.8%	0.0%	11.5%	-14.0%	25.4%	-15.4%	0.0%	29.9%	0.0%	0.0%	0.0%	
American Comp Ins Co	0.0%	0.0%	-2.7%	-11.0%	0.00%	new												
Lake States Insurance Co	0.0%	0.0%	0.0%	-10.0%	-13.3%	-5.7%	12.8%	3.8%	11.0%	1.2%	0.0%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	
American States Ins Co	2.5%	-6.5%	-2.7%	-7.2%	-18.3%	-5.4%	7.6%	7.8%	11.9%	6.4%	20.9%	-0.4%	-3.1%	7.0%	12.5%	5.0%	0.6%	
Mutual Ins Corp Of Am	6.0%	0.0%	0.0%	-9.2%	-11.8%	-2.1%	new											
Phoenix Insurance Co	0.0%	0.1%	-0.6%	0.0%	-29.4%	0.0%	3.5%	-25.0%	5.9%	-2.1%	21.0%	-5.2%	11.5%	-7.7%	14.4%	0.0%	-5.0%	
Legion Insurance Co	0.0%	-4.0%	0.0%	-18.5%	-10.6%	-11.1%	3.0%	0.5%	17.1%	-3.2%	14.9%	-15.4%	new					
Averages (Current Top 20)	-0.1%	-2.8%	-1.2%	-8.2%	-12.6%	-3.7%	3.6%	3.1%	11.4%	6.4%	11.0%	0.0%	0.7%	8.1%	8.8%	6.7%	-3.5%	
Top 20 Average By Year	-0.1%	-2.8%	-1.7%	-5.7%	-9.8%	-1.1%	2.9%	6.9%	7.1%	4.9%	11.2%	1.5%	-1.4%	8.8%	9.5%	11.5%	-2.6%	

in about the same two year increase. Of the twenty insurers in the survey for the 1991 final report, thirteen of the twenty followed the indications in the upward direction, after only four of those ten had followed the indications downward in the prior year.

The impact of the underwriting cycle is reflected in the average manual rates in Exhibit 6. In the initial two years of competition rates softened. The hard market period of 1985 to the first half of 1987 shows large rate increases. The market softened along with rates in the period 1987 to 1989. As indicated earlier, increases in 1990 may be due to the "indicated change" error. Manual rate increases from 1990 to 1993 show the recent hard market. From 1993 to 1999 a softer market emerged with many insurers filing large decreases to remain competitive and maintain market share. The mixed results for 2000 may foretell the end of softening. A review of these rate surveys overtime reveals that several companies have moved into the top twenty carriers as a result of offering reduced rates.

A problem with the above measure is that it only reflects changes in the manual rates filed by carriers and does not reflect changes in policies toward schedule credits and other adjustments of the manual premium. The above measure will also not indicate the manual rates or net premiums that employers are actually paying. If employers are shifting their business to carriers with lower rate structures, then the indicated "listed" rate level change will overstate the change in the rates that are actually being paid by employers. These considerations, of course, only arise with a competitive rating system in which carriers can charge different premiums for the same policy.

An alternative way of measuring the rate level is to simply divide written premiums by covered payroll. This measure indicates the actual premiums that employers are paying for their workers' compensation insurance in relation to their payroll. In this respect, it will reflect changes in the use of deductibles, schedule credits and other adjustments to the manual premium as well as the extent to which increasing rates have caused employers to seek lower priced insurers.

The Compensation Advisory Organization of Michigan maintains comparable figures on the number of policies, written standard premium, manual premium and covered payroll for the period 1982 to 1999. These figures and average rates per \$100 payroll are offered in the fifth column of Exhibit 7. The sixth column provides an index of average standard rates with the base year being 1982. The last two columns now show manual rates calculated in a similar manner as the standard rates and the percentage difference between manual and standard premiums.

Data in Exhibit 7 varies somewhat between preliminary, final reports and subsequent final reports as there are difficulties aggregating the information that is sent in by companies for each individual policy sold in the state. Estimated policy counts from policy declarations tend to run roughly 10 percent higher than actual policies written because of duplications where policy revisions occur. Standard premium from earlier years will be slightly lower than total estimated annual premium from most recent years because the former excludes expense constants and premium discounts while the latter does not.

A problem with rates calculated as premiums divided by payroll, however, is that a shift in payroll toward higher rated classifications would have a positive effect on the average rate and act to overstate any increase

in manual rates. For instance, a given employer might have to pay a higher premium, without a change in manual rates, if a change in their operations shifts some of their payroll from lower to higher rated classifications. Such an employer might pay more premium even though their payroll was unchanged. However, a significant classification shift was not indicated when a 1988 analysis of the top 100 classifications was performed, which isolated the effect of rate changes. The analysis, using uniform classification weights, the fraction a classification's payroll was of total payroll in 1987, and the classification's respective average rate from the three years ended 1988, indicated rates of change essentially the same as the actual increases.

Exhibit 7 data reveal that, from 1982 to 1984, the average rate for the total of all policies declined by 20 percent, from \$2.49 to \$2.01. During the next three years the average rate increased to \$2.75 in 1987 or nearly 37 percent, an annual increase of 11 percent per year. From 1987 to 1990, average rates were relatively stable. After a brief spike to \$2.91 in 1991, the highest average since 1982,

Exhibit 7
Policies, Premiums, and Payroll

1982 - 1999

		Standard		ge Rate Per \$100 Payroll				
		Premiums	Payroll	Standard	ĺ	Manual		
<u>Year</u>	<u>Policies</u>	(000's)	(000's)	Rate	<u>Index</u>	<u>Rate</u>	<u>Difference</u>	
			Voluntary Mar	<u>rket</u>				
1982	120,097	589,283	23,833,497	2.47	100.0%	2.68	-7.7%	
1983	126,310	572,079	26,648,607	2.15	86.8%	2.52	-14.8%	
1984	129,620	556,273	28,166,790	1.97	79.9%	2.36	-16.3%	
1985	127,750	634,036	29,697,705	2.13	86.3%	2.41	-11.4%	
1986	125,439	767,884	31,819,528	2.41	97.6%	2.58	-6.5%	
1987	126,329	871,985	33,870,928	2.57	104.1%	2.85	-9.7%	
1988	130,730	934,035	36,448,015	2.56	103.6%	2.87	-10.8%	
1989	135,148	1,010,806	38,974,961	2.59	104.9%	2.86	-9.3%	
1990	138,275	1,093,277	41,327,945	2.65	107.0%	2.96	-10.8%	
1991	137,063	1,171,189	42,571,896	2.75	111.3%	3.04	-9.4%	
1992	135,236	1,158,091	43,422,865	2.67	107.9%	3.18	-16.3%	
1993	135,831	1,228,362	46,208,984	2.66	107.5%	3.49	-23.9%	
1994	138,726	1,292,476	49,515,440	2.61	105.6%	3.68	-29.1%	
1995	142,361	1,253,291	55,273,594	2.27	91.7%	3.44	-34.0%	
1996	146,730	1,174,702	59,859,220	1.96	79.4%	2.93	-33.1%	
1997	151,244	1,053,245	66,185,521	1.59	64.4%	2.41	-34.0%	
1998	156,361	919,681	68,306,073	1.35	54.5%	2.40	-43.9%	
1999	129,337	633,187	47,965,724	1.32	53.4%	2.34	-43.6%	

^{1982 - 97} Standard and manual premium from unit statistical reports

1998 - 99 Total estimated annual premium obtained from policy declarations or unit statistical reports

Data Source: Compensation Advisory Organization of Michigan

24
Exhibit 7 - Continued

Policies, Premiums, and Payroll

<u> 1982 - 1999</u>

		Standard		Average	e Rate Per \$10	00 Payroll	
		Premiums	Payroll	Standard		Manual	
<u>Year</u>	<u>Policies</u>	<u>(000's)</u>	(000's)	<u>Rate</u>	<u>Index</u>	<u>Rate</u>	<u>Difference</u>
			5 1				
			Placement Fac	•			
1982	12,290	20,686	614,531	3.37	100.0%	2.95	14.1%
1983	10,383	17,932	424,748	4.22	125.4%	3.51	20.3%
1984	10,160	18,886	448,986	4.21	125.0%	3.59	17.2%
1985	14,858	60,692	1,459,998	4.16	123.5%	3.49	19.1%
1986	20,442	110,281	2,341,396	4.71	139.9%	3.98	18.3%
1987	22,268	122,318	2,330,399	5.25	155.9%	4.43	18.5%
1988	21,828	115,554	2,238,980	5.16	153.3%	4.42	16.7%
1989	22,101	119,327	2,408,740	4.95	147.2%	4.14	19.7%
1990	21,766	130,910	2,549,993	5.13	152.5%	4.13	24.4%
1991	23,165	152,509	2,934,739	5.20	154.4%	4.03	29.0%
1992	25,581	173,018	3,073,777	5.63	167.2%	4.31	30.5%
1993	27,296	172,086	2,910,745	5.91	175.6%	4.66	27.0%
1994	26,121	136,304	2,347,976	5.81	172.5%	5.02	15.6%
1995	25,217	100,687	1,914,227	5.26	156.3%	4.25	23.8%
1996	24,718	62,920	1,516,209	4.15	123.3%	3.55	16.8%
1997	22,740	42,627	1,197,444	3.56	144.0%	3.41	4.3%
1998	22,316	35,011	962,806	3.64	147.1%	2.63	38.3%
1999	17,166	26,634	720,518	3.70	149.5%	2.47	49.7%
			<u>Total</u>				
1982	132,387	609,969	24,448,028	2.49	100.0%	2.69	-7.3%
1983	136,693	590,011	27,073,355	2.18	87.3%	2.53	-13.9%
1984	139,780	575,159	28,615,776	2.01	80.6%	2.38	-15.5%
1985	142,608	694,728	31,157,703	2.23	89.4%	2.46	-9.4%
1986	145,881	878,165	34,160,924	2.57	103.0%	2.67	-3.7%
1987	148,597	994,303	36,201,327	2.75	110.1%	2.95	-6.9%
1988	152,558	1,049,589	38,686,995	2.71	108.7%	2.96	-8.4%
1989	157,249	1,130,133	41,383,701	2.73	109.5%	2.93	-6.9%
1990	160,041	1,224,187	43,877,938	2.79	111.8%	3.03	-8.0%
1991	160,228	1,323,698	45,506,635	2.91	116.6%	3.10	-6.2%
1992	160,817	1,331,109	46,496,642	2.86	114.7%	3.26	-12.2%
1993	163,127	1,400,448	49,119,729	2.85	114.3%	3.56	-19.9%
1994	164,847	1,428,780	51,863,416	2.75	110.4%	3.74	-26.4%
1995	167,578	1,353,978	57,187,821	2.37	94.9%	3.46	-31.6%
1996	171,448	1,237,622	61,375,429	2.02	80.8%	2.95	-31.6%
1997	173,984	1,095,872	67,382,965	1.63	65.2%	2.43	-33.0%
1997	173,964	954,692	69,268,879	1.38	55.2%	2.43	-33.0% -42.7%
1999	146,503	659,821	48,686,242	1.36	54.3%	2.34	-42.2%

^{1982 - 96} Standard and manual premium from unit statistical reports

1997 - 98 Total estimated annual premium obtained from policy declarations or unit statistical reports

Data Source: Compensation Advisory Organization of Michigan

average rates have trended downward. The decline has been so precipitous that the average rate in 1999, at \$1.36 is about 45 percent less than the average rate in 1982.

The downward trend in rates from 1991 to 1993 occurred in spite of rising insurer loss costs and was largely due to increasing use of large deductible policies. The more recent decline in average rates is due to improved market conditions as the market has entered a softening phase of the underwriting cycle over the last three years. The growing differential between manual and standard rates shown in the final column of Exhibit 7 from 1991 to 1994 is indicative that a significant part of the decline in average premiums is due to the use of large deductible policies. Unfortunately, the benefits of large deductibles only affected 1,097 out of 146,503 or less than one percent of the policies in 1999. The decreases in manual rates over the last six years are due to improving market conditions. This would appear to be the case because the growth of differential between standard and manual premium slowed after 1994.

Data on rates for the assigned risk facility show an increasing trend in rates from 1982 through 1993. After peaking in 1987, average facility rates declined a couple of years and returned to an upward trend until rates peaked again in 1993. Average facility rates have decreased significantly since peaking in 1993. Participation by employers in the facility will be used later as a proxy for a measure of availability. The fall in facility rates may reduce the incentives for placed employers to shop for cheaper coverage in the voluntary market. However, many employers with no other choice will enjoy a rate reduction. Employers with the ability to obtain voluntary coverage will enjoy the additional competitive pressure from the facility.

As shall be seen in the profitability section, total manual rate increases between 1989 and 1994 were probably not excessive given insurer cost increases. That increase in rates reflected only a portion of the increase in the cost of medical benefits in excess of the increase in wages. Had the costs of medical benefits grown at the same rate as wages, the total cost of claims would surely have fallen. The extent to which medical benefits have risen faster than the cost of indemnity benefits has been observed in the pure premium publications. These publications show medical benefits rising from less than a quarter of total benefits to over one-third between 1982 and 1993. To control the growth of medical benefit costs a medical fee schedule to place a cap on medical fees was initiated in 1989. The advisory pure premium publication incorporated a 9.8 percent reduction factor to anticipate the impact of the schedule. Estimates of the impact of the schedule on medical costs indicate that savings have been in the range of 10.1 to 10.6 percent according to CAOM statistics.

Rate changes by themselves, however, are not a sufficient basis on which to conclude that a market is competitive or not competitive. The relationship of price to cost or the rate of return on capital is much more critical. As stated before, in a perfectly competitive market, price equals marginal cost including the cost of capital, and excess profits are absent. Likewise, in a workably competitive workers=compensation insurance market, premiums would be no higher than that necessary to cover costs and provide a fair return on investment.

In this context, rate increases are justified if current rates are not sufficient to cover costs. Conversely, rates should decline if they are excessive in relation to costs. To some degree, rates should move with projected changes in the pure premium, which is incurred losses divided by covered payroll. Rate changes in any

given year, however, will also be affected by the adequacy or inadequacy of premiums in the previous year. For instance, if rates were inadequate in the previous year, then they would have to increase more than costs in the current year in order for premiums to be at adequate levels.

The Data Collection Agency's <u>DCA Pure Premium Publication</u> (also produced by the CAOM) provides loss cost information to insurers for rate setting purposes and also estimates the annual change in pure premiums. Exhibit 8 summarizes the history of indicated pure premium changes since 1982. The accumulated change in pure premiums over the eighteen years of indications since 1982 has been -0.2 percent meaning that rates are essential unchanged from 1982 levels. This is remarkable in a period when rising costs of litigation, health care and benefits appear to be such a problem in other states and may indicate increased insurer efficiency or decreased profitability. It had been anticipated that many insurers would continue decreasing rates by following the 2.7 percent decrease for 2000, however, this has yet to be seen in the rate survey data.

Exhibit 8

Indicated Changes in Pure Premium from 1982 to Present

Year	Indicated	Accumulated	Annualized
	Changes	Changes	Changes
1983	5.6%	5.6%	5.6%
1984	-8.7%	-3.6%	-1.8%
1985	-1.6%	-5.1%	-1.7%
1986	14.4%	8.5%	2.1%
1987	9.8%	19.2%	3.6%
1988	-8.2%	9.4%	1.5%
1989	-5.5%	3.4%	0.5%
1990	21.0%	25.1%	2.8%
1991	-3.2%	21.1%	2.1%
1992	11.5%	35.0%	3.0%
1993	4.0%	40.4%	3.1%
1994	7.2%	50.5%	3.5%
1995	-5.5%	42.2%	2.7%
1996	-15.7%	19.9%	1.3%
1997	-8.4%	9.8%	0.6%
1998	-2.7%	6.9%	0.4%
1999	-4.0%	2.6%	0.2%
2000	-2.7%	-0.2%	-0.0%

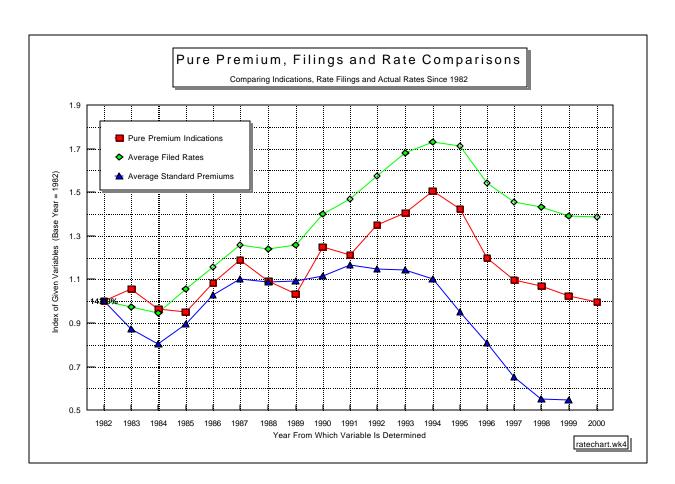
Source of Data: Insurance Bureau and Data Collection

The 21 percent indicated increase for 1990 needs explanation. Based on data that turned out to be incomplete, the DCA had calculated a 5.5 percent pure premium decrease for 1989. On the other hand, it was the contention of the industry board members of the DCA that the change should have been a 6 percent increase. Given the 5.5 percent decrease for 1989, the 21 percent increase for 1990 puts the pure premium levels back on track with actuarial indications based on complete historical data. The effect of these two changes together is a cumulative increase of 14.3 percent over the period from 1988 to 1990. Aside from changes in loss costs, the cost of reinsurance to direct insurers can also have an impact on rates. Insurers typically use reinsurance to expand their capacity to underwrite by obtaining excess limits coverage. During the insurance crisis of the mid-1980s reinsurers restricted certain kinds of coverages such as aggregate cumulative trauma disorders. However, the restrictive underwriting by reinsurers has ended over the last few years as direct writers have sought to retain as much of their business as possible without sharing risk and hence, premiums, with reinsurers.

Reviewing the growth of pure premium indications, standard premium rates and filed changes in manual rates since 1982, we know that accumulated pure premium indications through 1998 were only 7 percent above 1982. It has also been determined that the accumulated average of filed manual rates is 24 percent above 1982 levels. The average of estimated standard rates employers actually paid in 1998 however is over 40 percent less they were in 1982.

In order to compare these variables over the period of time since 1982, the chart below was constructed. Indices of the accumulated changes of each of these variables (as was done in column 6 of Exhibit 7) were calculated. The base year of the indices is 1982, where all indices start at 1.0 or 100%. A chart of line graphs of these variables was then constructed for each of the years since 1982. The highest line, which represents filed rates, could be high for several reasons. One reason is that the estimated impact on rates of filed changes is based upon a static analysis, i.e. numbers and types of insureds are assumed to remain the same before and after the change.

However, in the dynamic world, employers seeing increasing rates will always bok for lower rates elsewhere. In the resulting shuffle, actual average rates seen do not increase as much as filed rates and over time the upward bias in filed rate increases is magnified. Increasing use of large deductible policies and macroeconomic shift toward a lower premium service economy could also increase this bias. The chart shows the anomaly in the 1989 pure premium indication. The chart also shows the remarkably steady average of standard premium rates through 1994.



Due to the time lag in reporting data, indicated changes in the pure premium will tend to lag behind changes in actual experience. However, actual filed rate changes seem to coincide with pure premium indications. Past experience has shown that insurers tend to be rather conservative in following premium indications in a downward direction. Therefore, we might not expect rates to fall as much as pure premiums might indicate. Viewed in this context, the pattern of rate decreases continued through the end of 1999 and may continue into the year 2000. The chart also illustrates that insurers, cognizant of their own experience, may make rate changes prior to changes in pure premiums. This is a positive sign that insurers are strongly competing for business.

Profitability

A useful index of the industry's overall efficiency and profitability is the statewide loss ratio, which can be calculated by dividing incurred losses by earned premium. The loss ratio reveals the amount of actual loss protection received for each premium dollar paid. The portion of premiums not paid out in losses is available for expenses and profits. All else equal, higher loss ratios suggest greater cost efficiency and/or decreased profitability, while lower loss ratios imply decreased cost efficiency and/or increased profitability. Higher loss ratios would be the expected result of an increase in competition and lower rates. Conversely, lower loss ratios would be the expected result of less competition and higher rates.

Since workers' compensation claims are often paid out over a long period of time, only a small portion of calendar year losses are actually attributable to premiums earned that year. Thus, calendar year loss ratios are only a rough estimate of true loss ratios for this type of coverage.

There is a question of what loss ratio would permit insurers to earn a fair rate of return on investment in the workers' compensation insurance industry and hence would be consistent with a reasonable degree of competition. The derivation of such a loss ratio would be dependent upon assumptions about investment income, expenses, premium to surplus ratios, as well as the kind of data to which it was to be applied.

In December of 1998, the National Association of Insurance Commissioners (NAIC) published their profitability report for 1997 which contains national average loss ratios shown in the final column of Exhibit 9. Calendar year loss ratios compare losses incurred in a given year to premiums earned that year. The average of these countrywide loss ratios over the last seventeen years is 76.3 percent. More recent data have reduced this average. The ratio was somewhat high in the 1992 to 1994 period due to the predominance of data from 1988 through 1991, a period when rate increases had generally been suppressed and assigned risk facilities and their associated costs had grown. A loss ratio of 80 percent might be considered as a good benchmark of a competitive loss ratio to which comparisons might be made. Comparisons to the 80 percent loss ratio average must be made with some caution because calendar year loss ratios represented here do not compare losses incurred with the premiums paid for the policies to which these losses are attributable.

Exhibit 9

<u>Calendar Year Loss Ratios*</u> For The Great Lakes States

1981 - 1998

Year	Michigan	<u>Illinois</u>	<u>Indiana</u>	Minnesota	New York	<u>Pennsylvania</u>	Wisconsin	Ave w/o MI	Countrywide
1998	0.615	0.666	0.674	0.945	0.596	0.762	0.470	0.648	NA
1997	0.456	0.581	0.599	0.877	0.759	0.571	0.518	0.655	0.619
1996	0.504	0.587	0.529	0.728	0.966	0.639	0.522	0.716	0.632
1995	0.501	0.608	0.513	0.771	0.679	0.671	0.571	0.650	0.613
1994	0.596	0.769	0.645	0.758	0.876	0.680	0.577	0.748	0.608
1993	0.719	0.712	0.642	1.148	0.897	0.898	0.596	0.834	0.730
1992	0.903	0.784	0.723	1.097	1.083	0.975	0.707	0.950	0.831
1991	1.031	0.764	0.684	1.021	0.948	0.935	0.660	0.872	0.859
1990	0.912	0.800	0.740	0.957	1.002	0.928	0.645	0.887	0.852
1989	0.840	0.819	0.809	0.884	0.952	0.905	0.704	0.875	0.857
1988	0.880	0.785	0.879	0.968	0.908	0.889	0.753	0.865	0.857
1987	0.808	0.791	0.842	1.033	0.826	0.819	0.782	0.853	0.831
1986	0.861	0.791	0.819	1.002	0.807	0.872	0.872	0.814	0.848
1985	0.872	0.903	0.866	1.077	0.711	0.726	0.813	0.909	0.831
1984	0.862	1.005	0.832	1.336	0.857	0.837	0.705	0.813	0.971
1983	0.787	0.856	0.810	0.853	0.890	0.737	0.606	0.783	0.714
1982	0.550	0.726	0.700	1.024	0.825	0.729	0.683	0.715	0.647
1981	0.636	0.691	0.708	1.032	0.682	0.667	0.695	NA	0.665

^{*} These calendar year loss ratios are incurred losses including the effect of assessments on losses and excluding loss adjustment expense divided by net earned premiums. The "Ave w/o MI" is the weighted average excluding Michigan and is based upon proportions of premiums.

Sources:

Compensation Advisory Organization of Michigan,
New York Compensation Insurance Rating Board,
National Association of Insurance Commissioners
Minnesot

National Council on Compensation Insurance, Pennsylvania Compensation Rating Bureau,

Minnesota Worker's Compensation Insurer's Association, Inc.

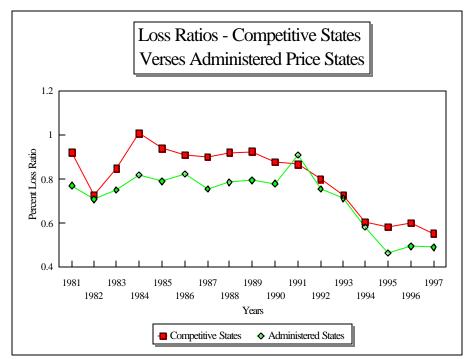
Calendar year industry-wide loss ratios for 1981 through 1998 are shown in Exhibit 9 for Michigan and six other states. From the initial low point of 0.550 in 1982, loss ratios rose to a peak of .872 in 1985 during the hard part of the most recent underwriting cycle. As the market softened through 1989, the Michigan loss ratios have varied around the national average of 80 percent and around the Great Lakes average. Evidence of a hardening market begins again in 1990 with significant increases in the loss ratios and insurer rates. The unsustainable high loss ratios of 1.031 in 1991 and 0.903 in 1992 might have created some concern as to the adequacy of rates. However, to a large extent, this high loss ratio was the result of two large insurance groups strengthening their reserves for prior years. To the extent that those high loss ratios

were due to reserve strengthening, concern over the adequacy of premium rates was alleviated.

Subsequent to the hard market period of 1991 and 1992 insurers have returned to making profits. The period of 1993 to 1998 has been the most profitable since the initiation of competition. This increased profitability has in turn resulted in declining premium rates, diminished market share for assigned risks and negative pure premium indications as insurers compete for more business. Overall, these figures indicate that from the employer's viewpoint there has been a significant improvement in the Michigan workers' compensation insurance market since the introduction of competitive rating.

The very low loss ratios and high profits since 1994 may become cause for alarm as it would appear premium rates are not reacting as quickly as might be expected in a smoothly operating market. However, much of the reason for the low loss ratios is the result of much better than anticipated loss costs from earlier years. Insurers have released reserves from those prior years and this has had a very positive effect on their profitability.

The chart of loss ratios at right was developed from data from the NAIC 1997 Report Profitability. The lines compare the average loss ratios of competitive administered versus pricing states. The higher line represents states that are typically considered competitive states, those that allow insurers to file and use their own premium rates. The lower line represents the states which approve rate filings



which are considered administered pricing states.

Through 1990 the results are quite dramatic. The competitive states receive much more benefits for their premium dollars. Since 1981, competitive states have averaged 81 percent loss ratios while administered pricing states averaged 72 percent. After 1990 the difference between the averages has fallen but an edge still remains with the competitive states. Since 1990 several states that were having problems with their workers= compensation insurance markets have moved to allow competition to set rates. This has coincided with large improvements in profitability for workers= compensation insurers as evidenced by the widespread drop in loss ratios. In 1995 through 1997 the competitive states regained part of the large differential that existed prior to 1990. The chart also highlights the observation that low loss ratios are a countrywide phenomenon.

The final profitability exhibit contains data from the NAIC's "Report on Profitability by Line by State 1997." Exhibit 10 contains, for the fifty states, the District of Columbia and the United States as a whole, the NAIC's profit on insurance transaction ratio and each state's rank from lowest profit ratio to highest for the last thirteen years.

The profit on insurance transactions ratio is based upon the ratio of operating profit to premiums earned, where operating profit includes underwriting profits, adds investment gains on insurance transactions and subtracts income taxes. Data from state workers' compensation funds, including The Accident Fund Company, are not included in Exhibit 10 at least through 1994.

Given the results of 1994 to 1997, Michigan is at the top of the Great Lakes states (excluding the monopolistic state - Ohio) in average profitability measured as profit on insurance transaction ratios. Michigans average profit of 7.7 percent ranks above the 5.7 percent average for the United States as a whole. Michigan insurers' trend in profitability had been downward from a high in 1985 until a negative position was reached in 1991. The profit ratio rebounded to slightly above the national average in 1992 and has since risen considerably for both Michigan and the United States as a whole.

The loss and profit ratio data for the period 1993 to 1998 indicate a highly profitable period for Michigan's workers' compensation insurers. Much of the profit would appear to be the result of better than anticipated loss development from prior years. This has led to the releasing of reserves which lowers incurred costs and, hence, loss ratios. This is one reason why loss ratios should not be used to set rates. However, financial solvency regulators should carefully review the adequacy of reserves. The higher 1998 ratio could indicate a turn in insurer profitability toward a reasonable profit level. This would help to explain why insurance rates may be leveling off in 2000.

It probably should be noted that a low profit ratio ranking is not necessarily indicative of good news for employers. Several states with low ranks in 1989 and 1990, notably Rhode Island (2), Louisiana (5 in 1989) and Maine (1 in 1989), were having severe problems with their workers' compensation insurance markets. In each of these states the residual market has grown to absurd levels. In 1991 residual market premiums as a percent of total were 85 percent in Rhode Island, 80 percent in Louisiana and 77 percent in Maine. Excessive repression of rates by insurance departments in these states has resulted in falling profits as well as insurers quitting the voluntary market. These three states have improved their positions with respect to insurance availability, but are now paying for past repressive policies with very high insurer profits. Maine, which has moved closer to open competition, has fared best of the three over the last few years.

Given the most recent data, it is apparent that this high profitability for Michigan insurers has been a transient phenomenon. Freely fluctuating rates and rate decreases have occurred as a result of competition for more business. A small turn in the underwriting cycle could be occurring in the year 2000.

32

<u>Exhibit 10</u>

<u>Profit on Insurance Transactions</u>

<u>Rank of State (Lowest PIT to Highest)</u>

	_					Ye	ear					<u></u>		
<u>State</u>	<u>199</u> <u>PIT</u> <u>I</u>		<u>199</u> <u>PIT R</u>		<u>199</u> <u>PIT</u> <u>R</u>		<u>199</u> <u>PIT R</u>		199	<u>3</u> Rank	<u>1992</u> <u>PIT Ra</u>	_	<u>199</u> <u>PIT Ra</u>	_
State	111 1	Xank	<u> 111 K</u>	ank	<u> </u>	ank	111 K	ank	111	Kank	111 K	<u> 111K</u>	111 K	<u>uik</u>
US	14.3%		12.1%		14.0%		13.1%		9.8%		3.2%		-0.3%	
Alabama	3.3%	7	11.0%	17	1.6%	2	26.1%	41	1.8%	12	1.1%	20	-7.2%	12
Alaska	11.7%	15	12.3%	18	19.9%	29	28.6%	44	18.1%	39	18.8%	42	16.6%	47
Arizona	15.3%	19	10.7%	16	8.4%	8	2.2%	5	3.4%	13	5.3%	25	5.9%	41
Arkansas	29.6%	42	38.6%	47	30.4%	44	19.0%	33	21.3%	42	4.2%	23	-7.2%	12
California	-0.4%	3	-1.7%	2	8.3%	7	10.8%	18	10.6%	26	0.6%	19	0.1%	25
			6.3%				12.8%							23
Colorado	7.4%	9		9	3.7%	4		21	7.6%	18	-2.2% -1.3%	14	-0.3%	
Connecticut	30.6%	46	32.1%	45	25.2%	40	25.4%	40	12.4%	30		15	4.2%	35
Delaware	17.2%	24	0.3%	3	2.9%	3	-4.7%	3	-0.9%	7	10.4%	33	5.8%	39
Dist of Colombia	18.2%	28	7.5%	10	17.3%	23	27.4%	43	13.0%	31	13.2%	35	22.1%	49
Florida	17.5%	25	2.5%	5	-6.8%	1	7.7%	11	-0.9%	7	-15.7%	2	-6.6%	14
Georgia	25.0%	39	18.7%	31	8.1%	6	18.9%	32	10.8%	27	1.6%	21	1.1%	28
Hawaii	24.8%	38	12.8%	21	22.3%	35	4.5%	8	-10.2%	2	-14.0%	3	5.6%	38
Idaho	1.3%	4	16.3%	26	9.3%	10	9.1%	15	8.8%	22	-1.1%	17	1.3%	29
Illinois	16.5%	21	13.6%	23	17.2%	22	14.2%	23	14.9%	34	9.9%	32	8.0%	43
Indiana	12.5%	16	19.1%	33	18.3%	25	11.0%	19	13.4%	33	8.0%	29	9.6%	45
Iowa	9.7%	12	10.2%	15	19.4%	27	19.3%	35	20.9%	40	11.3%	34	5.8%	39
Kansas	20.4%	31	21.1%	36	21.3%	32	8.4%	13	12.2%	29	-3.4%	12	-7.3%	11
Kentucky	30.8%	47	20.6%	35	21.9%	33	-1.2%	4	1.5%	11	5.8%	26	-5.6%	17
Louisianna	18.7%	29	17.9%	30	20.7%	30	57.2%	50	35.8%	48	15.7%	39	4.4%	36
Maine	56.3%	49	29.8%	44	39.5%	47	14.2%	23	29.1%	45	13.9%	37	-55.9%	1
Maryland	17.6%	26	1.6%	4	13.8%	14	18.3%	30	11.7%	28	2.1%	22	2.1%	31
Massachusetts	29.6%	42	28.3%	43	33.2%	46	26.3%	42	26.8%	44	18.8%	42	-13.2%	6
Michigan	23.2%	36	25.4%	41	27.6%	42	22.5%	37	16.5%	38	6.7%	28	-5.9%	16
Minnesota	20.6%	32	23.3%	39	24.6%	37	17.2%	28	5.8%	15	-4.0%	11	4.6%	37
Mississippi	14.0%	18	14.5%	25	21.9%	33	25.0%	39	22.7%	43	17.8%	41	1.5%	30

33
Exhibit 10 - Continued

<u>Profit on Insurance Transactions</u> <u>Rank of State (Lowest PIT to Highest)</u>

_							Year						Average	;
G	1990	1	1989		1988		1987		1986		1985		85-97	1
<u>State</u>	<u>PIT</u> Rar	<u>1K</u>	PIT Rank	<u> </u>	PIT Rar	<u>1K</u>	PIT Rar	<u>1K</u>	PIT Rar	<u>1K</u>	PIT Rank	<u> </u>	PIT R	<u>ank</u>
US	-0.2%		-0.2%		-1.0%		3.1%		3.0%		3.4%		5.7%	
Alabama	-11.6%	6	-9.4%	7	-13.1%	9	1.0%	17	2.0%	24	2.0%	22	0.7%	4
Alaska	17.3%	42	14.1%	44	14.0%	42	17.3%	44	-5.6%	8	1.2%	21	14.2%	45
Arizona	1.5%	28	3.2%	29	-0.6%	20	12.4%	37	6.6%	33	5.7%	32	6.2%	17
Arkansas	-6.3%	9	1.1%	26	2.3%	26	2.4%	21	2.4%	27	4.5%	28	10.9%	40
California	4.6%	32	5.4%	31	4.1%	29	6.4%	30	3.8%	28	3.5%	24	4.3%	11
Colorado	-40.1%	1	-7.8%	9	-7.1%	12	1.4%	19	-4.1%	10	-0.8%	13	-1.8%	3
Connecticut	4.7%	33	4.4%	30	2.3%	25	2.3%	20	5.8%	32	9.5%	37	12.1%	43
Delaware	21.0%	44	14.0%	43	10.1%	39	15.9%	41	8.4%	34	10.8%	39	8.6%	34
Dist of Colombia	30.6%	46	23.3%	47	29.8%	47	31.1%	46	28.5%	49	28.7%	49	22.4%	47
Florida	-5.2%	11	-20.4%	4	-21.0%	4	-12.4%	6	-4.7%	9	-0.3%	16	-5.1%	1
Georgia	0.7%	26	-3.3%	14	-5.8%	14	-1.0%	11	-7.8%	7	-8.1%	6	4.5%	12
Hawaii	4.9%	34	10.0%	37	18.5%	45	16.7%	42	22.3%	48	18.1%	46	10.5%	36
Idaho	1.2%	27	0.0%	20	-0.5%	21	5.6%	27	9.0%	35	-0.9%	12	4.6%	13
Illinois	5.6%	36	6.4%	33	8.8%	37	9.6%	34	9.9%	39	6.3%	34	10.8%	38
Indiana	5.5%	35	0.8%	25	-3.5%	17	-0.9%	12	1.9%	23	2.6%	23	7.6%	27
Iowa	9.2%	39	11.3%	39	-0.3%	22	-0.5%	13	1.2%	20	5.9%	33	9.5%	35
Kansas	-3.1%	17	-3.4%	13	3.7%	28	-0.3%	14	2.4%	26	0.9%	18	5.6%	16
Kentucky	-1.2%	24	11.5%	40	15.2%	44	13.9%	40	32.2%	50	10.5%	38	12.0%	42
Louisianna	-2.2%	21	-16.9%	5	-21.3%	3	-17.0%	3	-14.3%	4	-4.7%	7	7.2%	25
Maine	-28.5%	3	-37.7%	1	-29.0%	1	-26.6%	1	-35.1%	1	-28.2%	1	-4.5%	2
Maryland	11.6%	40	5.7%	32	14.7%	43	17.0%	43	14.6%	42	14.0%	40	11.1%	41
Massachusetts	-14.0%	4	-8.8%	8	-16.7%	7	-9.5%	7	-3.8%	11	3.5%	25	7.7%	28
Michigan	2.4%	30	6.6%	34	5.6%	33	11.7%	36	9.1%	37	14.7%	43	12.8%	44
Minnesota	8.0%	38	12.5%	41	11.2%	40	6.2%	29	4.0%	30	4.4%	27	10.6%	37
Mississippi	-3.0%	18	1.5%	27	-8.5%	10	1.1%	18	-2.2%	15	-3.6%	9	7.9%	30

34
Exhibit 10 - Continued

<u>Profit on Insurance Transactions</u> <u>Rank of State (Lowest PIT to Highest)</u>

	_					Ŋ	Zear							
	<u>199</u>	<u>97</u>	<u>199</u>	<u>96</u>	<u>19</u>	<u> 995</u>	<u>199</u>	<u>94</u>	<u>19</u>	<u>93</u>	<u>199</u>	<u>2</u>	<u>19</u>	<u>91</u>
<u>State</u>	<u>PIT</u>	Rank	<u>PIT</u> F	<u>Rank</u>	PIT F	<u>Rank</u>	PIT F	Rank	PIT	Rank	<u>PIT</u> R	ank	<u>PIT</u> R	<u>ank</u>
Missouri	16.9%	22	26.8%	42	17.9%	24	15.6%	26	16.3%	37	6.3%	27	-3.8%	20
Montana	8.7%	10	8.9%	14	26.1%	41	22.5%	37	16.0%	36	23.2%	45	38.1%	50
Nebraska	12.9%	17	14.0%	24	24.6%	37	19.3%	35	13.3%	32	9.8%	31	2.5%	34
Nevada	-16.1%	2	73.2%	50	45.3%	48	-15.0%	2	-52.0%	1	23.6%	46	-3.0%	21
New Hampshire	28.3%	41	12.7%	20	28.5%	43	30.4%	45	6.3%	16	-6.4%	6	-15.7%	4
New Jersey	16.0%	20	17.7%	28	16.4%	21	5.8%	10	1.3%	10	-8.5%	4	-6.6%	14
New Mexico	35.8%	48	23.6%	40	32.3%	45	32.2%	47	34.3%	46	14.4%	38	-8.7%	10
New York	9.0%	11	4.4%	8	7.5%	5	2.7%	6	0.2%	9	-6.0%	8	-0.2%	24
North Carolina	11.5%	14	17.7%	28	24.8%	39	17.0%	27	9.7%	23	-1.3%	15	-9.2%	8
North Dakota	27.2%	40	60.9%	49	16.1%	20	68.3%	51	46.6%	51	72.9%	51	-47.3%	2
Ohio	18.0%	27	74.8%	51	51.0%	50	17.5%	29	10.2%	24	33.6%	47	6.2%	42
Oklahoma	1.5%	5	8.2%	12	13.0%	12	3.8%	7	7.8%	19	-6.4%	6	-9.3%	7
Oregon	22.2%	35	2.6%	6	8.8%	9	15.5%	25	8.4%	21	38.4%	49	22.0%	48
Pennsylvania	23.2%	36	22.7%	37	15.1%	19	8.3%	12	-3.1%	3	-3.3%	13	-4.9%	18
Rhode Island	30.5%	45	17.1%	27	19.5%	28	18.8%	31	34.6%	47	21.8%	44	-15.4%	5
South Carolina	19.7%	30	3.3%	7	15.0%	18	14.0%	22	10.4%	25	15.8%	40	9.1%	44
South Dakota	29.8%	44	18.7%	31	18.8%	26	11.7%	20	-1.0%	5	-8.4%	5	2.1%	31
Tennessee	20.9%	33	20.3%	34	13.7%	13	8.9%	14	8.3%	20	-0.3%	18	-1.0%	22
Texas	5.8%	8	8.2%	12	14.7%	16	31.8%	46	21.0%	41	13.8%	36	2.2%	33
Utah	17.1%	23	8.1%	11	14.9%	17	4.7%	9	7.0%	17	-4.2%	10	0.5%	26
Vermont	1.5%	5	22.7%	37	20.9%	31	19.0%	33	-1.0%	5	-4.3%	9	0.8%	27
Virginia	20.9%	33	13.4%	22	14.4%	15	9.9%	16	5.7%	14	3.9%	23	-4.9%	18
Washington	67.5%	50	36.8%	46	49.2%	49	39.7%	49	44.9%	50	37.7%	48	40.9%	51
West Virginia	-42.6%	1	-58.0%	1	23.5%	36	-34.0%	1	-2.5%	4	68.0%	50	-8.8%	9
Wisconsin	11.4%	13	12.6%	19	9.6%	11	10.6%	17	15.0%	35	8.5%	30	10.1%	46
Wyoming	414.5%	51	43.8%	48	64.5%	51	38.4%	48	37.0%	49	-46.6%	1	-28.8%	3

35
Exhibit 10 - Continued

<u>Profit on Insurance Transactions</u> <u>Rank of State (Lowest PIT to Highest)</u>

_								Average						
<u>State</u>	<u>1990</u> <u>PIT</u> Ran	1,-	<u>1989</u> <u>PIT</u> <u>Ra</u>	n Iz	<u>1988</u> <u>PIT</u> Ran	1 _z	<u>1987</u> <u>PIT</u> <u>Ra</u>	n Iz	<u>1986</u> <u>PIT</u> <u>Ra</u>	n Iz	<u>1985</u> <u>PIT</u> <u>Ra</u>	n le	<u>85-97</u> <u>PIT</u> <u>Ran</u>	1,-
State	FII Kan	<u>K</u>	<u>F11 Ka</u>	<u>111K</u>	FII Kan	<u>K</u>	<u>F11 Ka</u>	<u>111K</u>	<u>F11 Ka</u>	<u>111K</u>	<u>F11 Ka</u>	<u>111K</u>	FII Kan	<u>K</u>
Missouri	-1.3%	23	-2.2%	15	-4.4%	16	4.0%	23	1.7%	21	1.0%	19	7.3%	26
Montana	-2.4%	20	13.3%	42	5.2%	32	-17.2%	2	-32.2%	2	-18.4%	2	7.1%	23
Nebraska	-1.4%	22	-5.0%	11	-2.5%	19	4.0%	24	3.8%	29	8.1%	36	8.0%	31
Nevada	36.2%	48	32.2%	48	49.9%	50	28.3%	45	15.4%	44	51.2%	51	20.7%	46
New Hampshire	-4.2%	13	0.1%	21	3.3%	27	6.5%	31	1.8%	22	0.5%	17	7.1%	24
New Jersey	-4.9%	12	7.4%	35	7.1%	35	13.0%	38	9.2%	38	14.1%	41	6.8%	20
New Mexico	-3.7%	15	-21.8%	3	-16.2%	8	-1.1%	10	-2.3%	14	-8.8%	5	8.5%	33
New York	7.4%	37	10.8%	38	9.2%	38	13.7%	39	14.7%	43	17.4%	45	7.0%	22
North Carolina	-13.0%	5	-1.8%	17	-5.7%	15	0.2%	16	5.4%	31	-1.8%	10	4.1%	10
North Dakota	62.9%	50	44.6%	51	52.0%	51	40.3%	49	36.1%	51	-1.8%	11	36.8%	50
Ohio	57.2%	49	37.5%	49	41.4%	49	36.9%	48	20.2%	46	47.5%	50	34.8%	48
Oklahoma	-8.5%	7	-1.9%	16	0.3%	23	11.3%	35	10.0%	40	-4.5%	8	1.9%	7
Oregon	20.3%	43	2.5%	28	-2.9%	18	3.0%	22	-0.4%	18	1.1%	20	10.9%	39
Pennsylvania	-2.5%	19	-0.4%	19	1.2%	24	8.0%	32	10.7%	41	14.5%	42	6.9%	21
Rhode Island	-33.1%	2	-24.4%	2	-26.2%	2	-15.9%	4	-8.4%	6	-10.0%	4	0.7%	5
South Carolina	1.8%	29	0.7%	24	4.2%	30	5.4%	26	-2.4%	13	4.5%	29	7.8%	29
South Dakota	4.4%	31	-1.1%	18	-7.2%	11	-6.3%	8	2.0%	25	5.1%	31	5.3%	14
Tennessee	-4.1%	14	-5.7%	10	-6.5%	13	-3.6%	9	-2.9%	12	-0.7%	14	3.6%	9
Texas	-8.5%	7	-14.6%	6	-18.5%	6	-12.4%	5	-9.6%	5	-16.5%	3	1.3%	6
Utah	-5.6%	10	-4.0%	12	13.7%	41	8.4%	33	17.8%	45	4.6%	30	6.4%	18
Vermont	-3.2%	16	0.4%	23	7.5%	36	-0.1%	15	-0.8%	17	8.0%	35	5.5%	15
Virginia	0.0%	25	0.2%	22	4.5%	31	5.1%	25	9.1%	36	3.5%	26	6.6%	19
Washington	27.0%	45	39.6%	50			48.5%	50	-0.1%	19	15.4%	44	36.6%	49
West Virginia	33.9%	47	18.3%	46	-21.0%	5	71.6%	51	-19.5%	3	18.1%	47	3.6%	8
Wisconsin	12.3%	41	8.7%	36	6.6%	34	5.7%	28	-1.0%	16	-0.5%	15	8.4%	32
Wyoming	64.7%	51	16.4%	45	33.9%	48	35.8%	47	21.3%	47	27.1%	48	55.5%	51

Availability

The last aspect of market performance that is evaluated is the availability of workers' compensation insurance coverage. Ideally, insurers should be willing to offer any employer coverage at a fair market price. In practice, of course, some businesses will be unable to obtain coverage in the voluntary market and, therefore, must obtain coverage through the Michigan Workers' Compensation Insurance Placement Facility. There are instances where insurers cannot adequately price a business under the existing rating system. This should happen less often now if insurers enjoy increased pricing flexibility under open competitive rating, but some residual market placements are probably inevitable even with workable competition.

At the same time, however, there are concerns about "redlining" against certain types of employers or geographic areas. "Redlining" refers to instances where businesses are unable to get coverage or can only obtain it at an exorbitant price due to an unsupported bias on the part of insurers or a conscious attempt to price discriminate in order to inflate profits. This kind of activity is not consistent with workable competition.

Exhibit 11 shows the percentage of policies, premiums, and payroll insured through the Michigan Workers' Compensation Insurance Placement Facility. The percentage of payroll in the facility is perhaps a somewhat better indicator of the relative significance of the residual market and overall availability since premiums tend to be higher in the facility because it contains a higher proportion of poor risks. The data for each year subsequent to 1993 until 1999 indicates that all facility placement measures are down. The preliminary results for 1999 show small increases in premium and payroll, but preliminary results can be biased high. The CAOM, in its testimony, indicated that assigned risk policies, premium and payroll, based on "year-to-date" statistics, show all three measures down not only in 1999 but also down over the last six years.

Exhibit 11 reveals a declining residual market share from 1980 to 1984. From 1985 to 1986, however, there was a sharp boost in facility placements. The data indicate a turn around in placements in 1987 through 1990, with facility premium, policies and payroll, for the most part, going in a downward direction. The data for 1991 through 1992 shows poorer results with policies and premium showing increases. The reduction in availability of insurance through the voluntary market is another indication that the market had hardened through 1992. Improved availability began during 1993 and gathered steam in 1994 and has continued through 1998 and perhaps 1999. This improvement was manifested by the reductions in all measures of assigned risk market share. The improved availability is a sign that insurers are competing to expand their business due to the improved profitability of taking this additional business.

Unfortunately, many smaller employers have not shared in as much of this improvement. The great reduction in percent of premium and payroll in the facility but smaller reduction in policies seems to imply this observation. This implication will be supported with the review of Exhibit 14.

Given information on residual markets from the National Council on Compensation Insurance, Exhibit 12 has been produced to provide a comparison of residual market burdens by state for the last eleven years.

The residual market burden is the policy year pool operating loss expressed as a percentage of direct voluntary market calendar year premiums. The operating loss is equal to earned premiums minus incurred losses minus servicing carrier allowance and other pool expenses plus pool interest income on cash flow. There are 33 comparable states and the District of Columbia with residual market plans administered by or reporting to the National Council on Compensation Insurance. The 18 other states not included in the comparison either do not report to the National Council or have monopolistic state funds for workers' compensation which do not require a residual market.

Exhibit 11

Percentage of Policies, Premium, and Payroll
in the Placement Facility

1980 - 1999

Year	<u>Policies</u>	<u>Premium</u>	<u>Payroll</u>
1980	9.8%	4.6%	4.1%
1981	10.2%	3.6%	3.3%
1982	9.3%	3.4%	2.5%
1983	7.6%	3.0%	1.6%
1984	7.3%	3.3%	1.6%
1985	10.4%	8.7%	4.7%
1986	14.0%	12.6%	6.9%
1987	15.0%	12.3%	6.4%
1988	14.3%	11.0%	5.8%
1989	14.1%	10.6%	5.8%
1990	13.6%	10.7%	5.8%
1991	14.5%	11.5%	6.4%
1992	15.9%	13.0%	6.6%
1993	16.7%	12.3%	5.9%
1994	15.8%	9.5%	4.5%
1995	15.0%	7.4%	3.3%
1996	14.4%	5.1%	2.5%
1997	13.1%	3.9%	1.8%
1998	12.5%	3.7%	1.4%
1999	11.7%	4.0%	1.5%

manual premium from unit statistical reports.

standard premium from unit statistical reports or policy declarations.

1998-1999 total annual premium obtained from policy declarations.

Source of Data: Compensation Advisory Organization of Michigan Exhibit 1 of Biannual Report

Exhibit 12

Residual Market Burden
Selected Years 1991 to 1998

Ratio of Operating Loss to Voluntary Premiums (R/V) Rank of State (Lowest R/V to Highest)

	Year												
-	1998	3	<u>1997</u>		<u>1996</u>		<u>1995</u>		<u>1993</u>		<u>199</u>	1	
<u>State</u>	R/V R	<u>ank</u>	R/V Ra	<u>.nk</u>	R/V Rai	<u>nk</u>	R/V Ra	<u>.nk</u>	R/V Ran	<u>1k</u>	R/V R	<u>ank</u>	
Σ 33 States & DC	0.7%		0.5%		-0.1%		-1.0%		1.9%		10.1%	@	
Alabama	0.2%	5	0.7%	18	1.8%	25	-4.6%	7	11.3%	23	27.4%	29	
Alaska	3.6%	24	3.9%	26	0.0%	13	-2.2%	12	-1.4%	7	1.9%	7	
Arizona	0.0%	2	0.0%	6	0.0%	13	0.0%	21	0.6%	14	1.2%	6	
Arkansas	-0.3%	1	-4.2%	1	-6.6%	1	-16.1%	1	-28.9%	2	20.9%	27	
Connecticut	0.7%	11	0.4%	13	0.0%	13	-0.8%	17	1.8%	18	6.1%	14	
Delaware	1.0%	16	2.6%	23	5.1%	26	5.9%	28	11.8%	24	5.8%	13	
Dist Of Columbia	0.4%	6	-0.6%	3	-0.2%	9	-1.2%	14	0.7%	15	5.1%	12	
Florida		*		*		*		*	16.9%	28	27.6%	30	
Georgia	0.5%	8	0.4%	13	0.3%	17	-1.1%	15	8.8%	22	9.1%	15	
Hawaii		*	4.2%	27	-4.8%	3	-2.6%	11	14.6%	26	9.4%	16	
Idaho	0.1%	4	0.0%	6	-0.1%	11	-0.2%	19	-0.3%	11	-0.3%	3	
Illinois	0.4%	6	0.1%	9	0.0%	13	-0.9%	16	-0.4%	9	2.0%	8	
Indiana	0.0%	2	-0.3%	4	-0.1%	11	-0.3%	18	-1.9%	6	0.0%	5	
Iowa	0.9%	15	0.2%	10	0.5%	19	-0.1%	20	-4.2%	4	-0.3%	3	
Kansas	1.5%	21	0.7%	18	-2.0%	6	-5.0%	6	-3.4%	5	16.3%	25	
Kentucky		*		*		*	30.4%	29	48.2%	30	44.2%	31	
Louisiana		*		*		*		*		*	117.8%	32	
Maine		*		*		*		*		*		*	
Massachusetts	0.6%	10	-1.0%	2	-3.0%	4	-5.7%	4	-55.3%	1	2.2%	9	
Michigan	0.7%	11	0.3%	11	0.7%	21	0.1%	22	-0.4%	9	3.7%	11	
Mississippi		*		*		*		*		*	11.1%	18	
Missouri		*		*		*	-3.0%	9	-1.0%	8	11.8%	21	
Nebraska		*	0.0%	6	-0.2%	9	-1.6%	13	1.3%	16	3.2%	10	
New Hampshire	1.6%	22	1.3%	22	1.5%	24	0.7%	24	5.1%	19	10.2%	17	
New Jersey	0.8%	13	1.0%	21	0.3%	17	1.6%	26	7.6%	21	13.3%	23	
New Mexico	1.0%	16	-0.3%	4	1.1%	23	-6.1%	3	-20.1%	3	-4.0%	1	
North Carolina	1.3%	20	0.3%	11	-0.7%	7	-2.9%	10	-0.2%	12	12.2%	22	
Oregon	0.8%	13	0.7%	18	0.6%	20	0.4%	23	0.1%	13	-1.8%	2	
Rhode Island		*		*		*		*		*	179.0%	33	
South Carolina	1.0%	16	0.6%	16	0.7%	21	1.5%	25	7.4%	20	11.6%	20	
South Dakota	0.5%	8	0.5%	15	-2.3%	5	-3.4%	8	1.3%	16	11.3%	19	
Tennessee		*	3.3%	25	-5.1%	2	-11.0%	2	16.1%	27	16.7%	26	
Vermont	1.2%	19	0.6%	16	-0.5%	8	-5.2%	5	20.4%	29	21.2%	28	
Virginia	2.4%	23	3.1%	24	6.1%	27	2.9%	27	14.5%	25	15.7%	24	
, 1151111tt	2.170	23	3.170	2 '	0.1/0	2,	2.570	21	11.5/0	23	15.770	۷.	

Source of Data: National Council on Compensation Insurance, evaluation as of March 31, 1999. A negative number implies a negative burden or an operating gain. See text regarding the other eighteen states.

Exhibit 12 – Continued

<u>Residual Market Burden</u> Selected Years 1984 to 1989 and Averages

Ratio of Operating Loss to Voluntary Premiums (R/V) Rank of State (Lowest R/V to Highest)

	Year												
	<u>1989</u>	<u> </u>	<u>1988</u>		<u>1987</u>		<u>1985</u>		<u>1984</u>		<u>Avera</u>	<u>ige</u>	
<u>State</u>	R/V R	<u>ank</u>	R/V Rar	<u>ık</u>	R/V Ran	<u>k</u>	R/V Rai	<u>nk</u>	R/V Ran	<u>1k</u>	R/V R	ank	
Σ 33 States & DC	16.8%	@	16.3%		17.3%		10.9%		5.9%		3.3%		
Alabama	29.4%	28	31.7%	29	20.0%	27	19.0%	30	9.9%	30	15.9%	29	
Alaska	-2.6%	1	-2.1%	1	-1.7%	1	3.0%	5	1.3%	10	0.6%	3	
Arizona	0.9%	4	1.5%	4	1.7%	3	0.5%	3	0.2%	2	0.9%	4	
Arkansas	33.7%	29	17.8%	24	17.7%	24	8.7%	20	2.8%	13	4.7%	14	
Connecticut	7.3%	11	6.0%	11	5.6%	11	4.2%	8	1.0%	7	3.4%	9	
Delaware	0.9%	4	0.6%	3	4.7%	9	8.1%	19	1.0%	7	4.9%	15	
Dist Of Columbia	3.6%	6	1.8%	6	2.3%	6	5.9%	15	7.0%	26	2.2%	6	
Florida	40.1%	30	50.6%	31	46.5%	31	23.7%	31	13.1%	31	20.1%	30	
Georgia	11.2%	14	2.4% 7		15.2%	19	9.8%	21	3.5%	17	7.2%	22	
Hawaii	4.7%	9	2.4%	7	1.8%	4	-0.1%	1	0.2%	2	3.8%	11	
Idaho	0.3%	3	-0.3%	2	0.2%	2	0.0%	2	0.0%	1	-0.1%	1	
Illinois	4.2%	7	4.6%	9	5.1%	10	5.5%	13	5.2%	22	2.3%	7	
Indiana	9.0%	12	13.3%	18	14.1%	17	7.8%	18	3.0%	14	3.6%	10	
Iowa	4.8%	10	6.8%	12	10.5%	14	5.6%	14	3.0%	14	2.4%	8	
Kansas	22.0%	26	10.9%	15	15.6%	21	7.7%	17	3.5%	17	6.6%	20	
Kentucky	23.6%	27	18.5%	25	15.6%	21	13.0%	25	9.6%	29	22.7%	31	
Louisiana	90.7%	32	82.0%	32	58.1%	32	42.4%	33	17.5%	32	38.6%	32	
Maine		*		*	720.0%	34	83.4%	34	60.1%	34	104.7%	34	
Massachusetts	50.4%	31	33.7%	30	34.6%	30	13.6%	27	5.8%	25	4.1%	13	
Michigan	4.3%	8	3.3%	8	2.6%	7	5.0%	11	1.3%	10	1.9%	5	
Mississippi	16.0%	21	16.2%	22	18.5%	26	10.5%	22	4.1%	20	7.7%	23	
Missouri	17.4%	23	14.6%	19	16.3%	23	13.1%	26	5.7%	24	7.0%	21	
Nebraska	17.8%	24	17.0%	23	12.6%	15	11.8%	23	1.1%	9	6.2%	18	
New Hampshire	14.8%	18	29.9%	28	15.4%	20	5.3%	12	3.8%	19	9.0%	25	
New Jersey	9.1%	13	4.7%	10	4.1%	8	3.1%	6	0.6%	4	5.4%	17	
New Mexico	19.2%	25	22.0%	27	32.8%	29	7.4%	16	0.9%	5	4.0%	12	
North Carolina	14.8%	18	13.2%	17	9.3%	13	4.4%	10	2.1%	12	5.4%	16	
Oregon	0.2%	2	1.6%	5	2.2%	5	1.5%	4	0.9%	5	0.3%	2	
Rhode Island	159.2%	33	84.1%	33	81.3%	33	28.0%	32	20.0%	33	60.5%	33	
South Carolina	14.3%	17	9.9%	13	13.8%	16	4.3%	9	4.2%	21	6.6%	19	
South Dakota	15.8%	20	20.0%	26	20.4%	28	15.5%	28	9.4%	28	9.6%	26	
Tennessee	16.2%	22	15.9%	21	17.7%	24	12.0%	24	5.4%	23	10.0%	27	
Vermont	12.3%	15	15.7%	20	14.2%	18	15.7%	29	7.6%	27	10.5%	28	
Virginia	12.5%	16	10.6%	14	8.0%	12	3.3%	7	3.0%	14	8.7%	24	

Source of Data: National Council on Compensation Insurance, evaluation as of March 31, 1999. A negative number implies a negative burden or an operating gain. See text regarding the other eighteen states.

A review of Exhibit 12 indicates, Michigan does quite well with respect to other comparable states. Over the last eleven years Michigan has averaged seventh in rank in maintaining a low residual market burden. Data over the last eleven years show the burden having small variations around the eleven-year average of 1.8 percent, which means the residual market subsidy is stable, and under control. Unfortunately, the same cannot be said for several other states. Some states which have not maintained a healthy competitive market are experiencing availability problems which are reflected in this exhibit. The residual market burden percentage is not a measure of actual cash assessments of insurers for pool business. The actual cost of the facility has averaged less than \$2.4 million between 1992 and 1998 after having averaged over \$30 million from 1985 to 1991.

Some observers might find the fact that insurance availability moves inversely with rates difficult to understand. It would seem that as rates increase insurers would find it desirable to write more policies rather than fewer. The fact is that insurers try to regulate the volume of their business according to their level of surplus; that is, they attempt to maintain a premium to surplus ratio within a certain acceptable range. Diminished surplus due to a period of relatively low pricing will cause insurers to increase their rates in order to restore profitability as well as restrict their volume of business in order to maintain an acceptable premium to surplus ratio. The recent data now show that as rates have fallen, availability has improved.

In order to get a better understanding of which employers have the highest participation in the facility, Exhibit 13 was constructed showing the 35 classes currently with the highest percentage of payroll insured in the facility. Most of the classifications shown are of relatively high risk, such as occupations with federally mandated coverages with high benefits and liberal interpretation of the federal laws. These classifications also tend to be unique as indicated by the low numbers of insureds. These are the employers that tend to have the greatest difficulty in finding voluntary coverage, that have been in the facility for many years, and are for whom the facility was originally created. This is evident from the number of classes that have consistently (several since 1986) been on these lists of high percent of payroll or 100 percent of the class in the facility.

Exhibit 13

Thirty Classes with the Highest Percentage of Payroll in the Placement Facility But With Some Voluntary

Market During 1999 (with data since 1987 if available)

Class					Perce	nt of Pav	roll In F	Facility E	By Year						
Code	Class Description	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986
908 Dom	estics Inside - Occasional	77%	65%	49%	48%	47%	46%	48%	48%	47%	NA	41%	41%	40%	NA
909 Dom	estics Outside - Occasional	66%	36%	36%	38%	37%	33%	37%	38%	34%	32%	31%	NA	NA	NA
912 Dom	estics Outside	67%	54%	23%	8%	37%	40%	39%	40%	39%	25%	NA	NA	NA	NA
913 Dom	estics Inside	51%	66%	43%	38%	34%	33%	2%	NA	30%	42%	40%	44%	42%	NA
2110 Pickl	le Manufacturing	17%	0%	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2587 Towe	el or Toilet Supply	6%	4%	3%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2702 Logg	ging	9%	14%	26%	53%	59%	58%	49%	30%	NA	NA	NA	NA	NA	NA
3082 Foun	ndry: Steel Castings	9%	2%	3%	10%	6%	30%	35%	35%	19%	18%	NA	NA	NA	NA
3085 Foun	ndry: Non-ferrous	8%	6%	7%	9%	14%	11%	16%	16%	17%	28%	19%	25%	NA	NA
3188 Plum	bers Supplies Mfg	6%	0%	0%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3220 Can	Manufacturing	28%	0%	2%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4779 Expl	osives Cap Primer	31%	10%	12%	3	3	4	4	4	4	3	3	3	4	3
5610 Clear	ner - Debris Removal	6%	8%	13%	17%	18%	15%	17%	21%	NA	NA	NA	NA	NA	NA
6824 Boat	Building US Act	48%	99%+	85%	99%	65%	69%	84%	69%	68%	74%	83%	68%	71%	80%
6826 Mari	na US Act	39%	48%	60%	57%	98%	82%	73%	81%	88%	90%	90%	90%	92%	90%
	els NOC State Act	8%	0%	100%	NA	NA	NA	NA	NA	NA	NA	NA	60%	17%	59%
7220 Taxio	cab Drivers	11%	18%	37%	37%	42%	55%	62%	60%	57%	58%	68%	76%	79%	80%
	edoring By Hand	61%	55%	77%	34%	79%	99%+	99%	99%	60%	1	2	2	NA	2
7337 Dred	ging Prgm II USL&H Act	52%	24%	20%	13%	10	8	6	3	5	4	5	2	NA	NA
7360 Freig	ght Handling U.S. Act	5%	1%	1%	3%	7%	9%	26%	21%	30%	20%	NA	NA	NA	NA
7398 Divi	ng Marine Prgm II U.S. Act	95%	22%	13%	97%	6	3	7	59%	10	6	5	2	2	2
7422 Air C	Carrier - Flying Crew NOC	11%	9%	11%	20%	20%	30%	32%	27%	30%	NA	NA	NA	NA	NA
	Carrier - Ground Employees	8%	7%	8%	13%	12%	17%	21%	15%	NA	NA	NA	NA	NA	NA
7904 Firef	ighters-Waiver of Coordin	7%	8%	7%	6%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ding Farm or Stable	20%	23%	26%	28%	31%	37%	41%	45%	42%	39%	49%	47%	46%	33%
	edores Clerks U.S. Act	30%	28%	25%	5	6	6	6	99%	6	6	6	6	6	NA
	edores Clerks State Act	28%	0%	13%	3	6	4	6	89%	48%	87%	89%	92%	72%	75%
,	th or Exercise Institute	10%	7%	7%	8%	9%	10%	11%	11%	NA	NA	NA	NA	NA	NA
	iters NOC - Players et al	9%	7%	8%	13%	10%	NA	NA	24%	15%	17%	NA	NA	NA	NA
9521 Hous	se Furnishings Installation	7%	5%	7%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

When integers appear in the table above it refers to the number of policies when 100 percent of payroll is in the facility.

Exhibit 13 - Continued

<u>Average Assigned Risk Percentage for the Thirty Classes with the Highest Percentage of Payroll in the Placement Facility</u> <u>But With Some Voluntary Market During 1999</u>

Average assigned risk percentage for the top 30 classes correspond to percent published in the reports for the specified years:

	<u>1999</u>	<u>1998</u>	<u>1997</u>	<u>1996</u>	<u>1995</u>	<u>1994</u>	<u>1993</u>	<u>1992</u>	<u>1991</u>	<u>1990</u>	<u>1989</u>	<u>1988</u>	<u>1987</u>	<u>1986</u>
CAOM Ave from Top 30														
Final Reports:		7.6%	10%	14%	21%	25%	32%	39%	46%	56%	63%	63%	62%	65%
CAOM Ave from Top 30														
Initial Report:	8.9%	9.3%	12%	14%	24%	27%	34%	36%	43%	66%	70%	74%	81%	81%

History of Classes with 100 Percent of Payroll in the Placement Facility 1986 - 1999 In Order of Class Code*

Class						Numb	er of Pol	icies or I	Percent A	Assigned	Risk by	Year				
Code Class Description		<u>19</u>	<u>99</u>	<u>1998</u>	<u>1997</u>	<u>1996</u>	<u>1995</u>	<u>1994</u>	<u>1993</u>	<u>1992</u>	<u>1991</u>	<u>1990</u>	<u>1989</u>	<u>1988</u>	<u>1987</u>	<u>1986</u>
1164 Quarry Cement Rk St	urfc Mine		1	1	NA	30%	13%	1%	3	2	1	NA	NA	NA	NA	1
7046 Vessels (No Propulsi	on) Prgm I		1	1	1	1	1	NA								
7394 Diving Marine Prog l	[2	2	5	72%	4	NA	7	2	3	3	3	NA	3	90%
7395 Wrecking Marine - S	tate Act		5	5	6	4	4	59%	63%	61%	49%	NA	52%	33%	75%	NA
8726 Steamship Line or A	gency		1	9%	3	3	4	3	4	4	81%	5	81%	82%	70%	NA
<u>Description</u>	<u>1999</u>	<u>1998</u>	<u>19</u>	<u>997</u>	<u>1996</u>	<u>1995</u>	<u>1994</u>	<u>1993</u>	<u>1992</u>	<u>1991</u>	<u>1990</u>	<u>19</u>	989	<u>1988</u>	<u>1987</u>	<u>1986</u>
Totals for 1999:																
Number of Policies:	10															
Number of Classes:	5															
Totals from prior reports:																
Number of Policies:		14		29	44	62	51	63	48	65	207	' 1	.62	141	72	79
Number of Classes:		7		12	18	19	20	20	20	22	22		25	17	21	19

^{*} The percentages refer to previously published values of high assigned risk percentage classifications.

Source: Compensation Advisory Organization of Michigan

There has been a concern that small employers are subject to greater availability problems than large employers. Exhibit 14 shows the relative participation in the facility by premium size for the years 1982 through 1999. Relative participation is measured by dividing the percentage of policies (or premium) in the facility for a particular premium size category by the percentage of policies (or premium) for that category in the voluntary market. For example, if 40 percent of all voluntary risk policies were in the \$500 or less premium range, and if 50 percent of all assigned risk policies were in the same range, a ratio of 1.25 (50 percent divided by 40 percent) would be generated. A ratio of 1.0 means the group is equally represented in both the voluntary risk and assigned risk markets. Thus, a smaller ratio would be preferred by policyholders in a given premium range.

Exhibit 14 reveals that the smallest risks have tended to account for a larger share of the facility business than their share of the voluntary market. However, over the period from 1982 to 1995 or 1996, the larger premium size classes have shown a significant increase in their relative participation in the facility. The recent data for the smallest and next to smallest range after 1995 indicate a relatively high participation rate in the facility. The ratios of 5.0, 9.4 and 8.3 for this ratio in the next to smallest class in 1997, 1998 and 1999 respectively are particularly bothersome. This is somewhat mitigated by the ratio of 1.5, 2.6 and 2.7 based on percent of policies for this same premium range for those years.

It is unclear at this point why the ratios based on premiums are so high. One might speculate that small construction or manufacturing operation classifications that typically have high rates have a disproportionate participation in the facility in this range. These smaller groups will tend to have better rates with the facility because of higher minimum premiums charged by the voluntary market. The impact of minimum premiums is to encourage many smaller employers to purchase an assigned risk policy or to push those in the voluntary market into a higher range at least until a payroll audit brings a final determination of premium that is reported in the unit statistical reports. The evidence from Exhibit 14 shows that general reduction in the facility participation rates over the last few years has not helped these smaller employers as much as it has helped the larger ones.

Overall, the residual market data indicate that, with the move to open competition there were a few years of improvement. With the turn in the underwriting cycle the availability of coverage in the workers' compensation insurance market worsened in the period from 1985 through 1987. In 1988 insurers' surplus began to improve and they sought to raise their volume and this is reflected in the 1988 through 1990 numbers. The slightly harder market of 1991 and 1992 is reflected in somewhat higher facility participation for those years and in 1993. Data during and subsequent to 1993 indicate that availability began to improve. The soft market, which began about 1994, is reflected by significant improvements in every measure of assigned risk market share over each of the last six years. However, smaller employers appear to have not experienced as much of the benefits of competition as large employers.

44

Exhibit 14

Placement Facility Participation Ratios*

Premium Range Groups to Industry-wide

1982 - 1999

Premium Ranges	Ratio of	<u>1999</u>	<u>1998</u>	<u>1997</u>	<u>1996</u>	<u>1995</u>	<u>1994</u>	<u>1993</u>	<u>1992</u>	<u>1991</u>	<u>1990</u>	<u>1989</u>	<u>1988</u>	<u>1987</u>	<u>1986</u>	<u>1985</u>	<u>1984</u>	<u>1983</u>	<u>1982</u>
0 - 500	Premiums	2.89	3.50	3.53	4.33	2.97	2.13	1.68	1.60	1.52	1.58	1.68	1.65	1.39	1.22	1.32	2.59	3.02	3.53
	Policies	0.87	1.12	1.66	1.88	1.87	1.72	1.61	1.55	1.39	1.41	1.38	1.36	1.25	1.18	1.21	1.32	1.38	1.41
501 - 1,000	Premiums	8.33	9.39	5.03	3.11	2.22	1.71	1.36	1.05	1.38	1.15	1.22	1.18	1.07	0.99	1.05	2.04	2.23	2.60
	Policies	2.68	2.56	1.47	1.04	1.04	0.99	0.99	0.84	1.15	0.89	0.90	0.89	0.90	0.87	0.87	0.89	0.86	0.91
1,001 - 5,000	Premiums	1.23	1.53	1.87	1.68	1.26	1.14	0.95	0.85	0.84	0.89	0.97	0.97	0.96	0.92	0.92	1.51	1.63	1.70
	Policies	0.44	0.45	0.55	0.58	0.61	0.68	0.70	0.70	0.66	0.69	0.74	0.75	0.82	0.83	0.79	0.69	0.66	0.62
5,001 - 10,000	Premiums	0.91	1.02	1.35	1.20	0.93	0.93	0.78	0.75	0.74	0.81	0.89	0.90	0.93	0.89	0.88	1.31	1.34	1.31
	Policies	0.29	0.27	0.37	0.38	0.43	0.52	0.54	0.59	0.56	0.62	0.64	0.67	0.77	0.78	0.72	0.57	0.51	0.45
10,001 - 50,000	Premiums	0.73	0.81	1.07	1.11	0.97	0.99	0.94	0.95	1.03	1.10	1.06	1.06	1.07	1.22	1.18	1.35	1.24	1.31
	Policies	0.24	0.23	0.29	0.36	0.43	0.54	0.63	0.71	0.74	0.79	0.72	0.75	0.83	1.01	0.91	0.56	0.46	0.45
50,001 - 100,000	Premiums	0.35	0.65	0.68	0.95	1.17	1.20	1.09	1.19	1.43	1.38	1.35	1.32	1.36	1.53	1.60	1.32	1.53	0.84
	Policies	0.11	0.18	0.18	0.31	0.53	0.67	0.75	0.92	1.08	1.03	0.96	0.98	1.12	1.38	1.29	0.57	0.60	0.32
100,000 - 499,999	Premiums	0.47	0.35	0.64	0.80	0.88	1.08	1.23	1.37	1.37	1.24	1.10	1.14	0.98	1.18	1.13	0.25	0.27	0.36
	Policies	0.17	0.09	0.19	0.26	0.41	0.62	0.85	1.10	1.12	1.06	0.80	0.80	0.89	1.10	0.98	0.22	0.17	0.28
Over 500,000	Premiums	0.31	0.19	0.11	0.28	0.81	0.61	0.74	0.62	0.56	0.58	0.65	0.58	0.74	0.40	0.30	0.25	0.27	0.36
	Policies	0.20	0.09	0.07	0.19	0.10	0.43	0.57	0.72	0.57	0.45	0.65	0.47	0.64	0.40	0.35	0.22	0.17	0.28

^{* -} Percentage of total placement facility premiums or policies divided by percentage of total voluntary premiums or policies. Note: A value of 1.00 means the percentage of that premium range group in the assigned risk facility equals the percentage in that premium range group in the voluntary market.

1982 - 1997 premium ratios based on standard premium obtained from unit statistical reports filed by insurers.

Source: Compensation Advisory Organization of Michigan

^{1998 - 1999} premium ratios based on total estimated annual premium obtained from policy declarations filed by insurers.

V. CONCLUSION

With respect to the market tests for competition specified in MCLA 500.2409(3), the following findings have been made. The structure of this market is conducive to competition. Many insurance options exist and no one insurer or group of insurers dominates the market. The high disparity in manual rates indicates the lack of price fixing. While the rates filed by the leading insurers were virtually unchanged between 1987 and 1989, increased from 1990 to 1991 or 1992 and have fallen subsequently, there is no indication that, on the whole, employers are paying excessive premiums for workers' compensation insurance.

Availability has become less of a concern due to the downward trend in the percentage of insureds in the facility, which began in 1994. On the other hand, some smaller businesses may not be seeing as great an improvement in availability as others. The positive effect of improved profitability and expanded insurers' capacity to write policies may explain the reduced market share of the facility.

Loss costs appear to have been contained over the last several years and a market softening that began in 1993 has continued through the end of 1999. The data are showing that expanding availability has followed moderating premium rates as had been anticipated in previous reports.

Profitability, as indicated by the latest available loss ratios and the profit on insurance transaction ratio information from the NAIC, has improved dramatically. Improved profitability, as reflected by the loss ratios from 1993 to 1998 and profit on insurance transaction ratios from 1993 to 1997, has resulted in improved insurer surplus. This has allowed insurers to decrease rates and to expand availability, resulting in fewer employers remaining in the assigned risk pool.

The workers' compensation insurance market should be characterized as soft. The positive signs of a soft market include the fact that premium rates actually paid have continued to diminish since 1994. Requested manual rate changes, as well as average filed rates from 1995 through to-date in 1999, have been for decreases and the pure premium indications for 1995 through the year 2000 are negative. On the other hand, loss ratios began to increase in 1998 and actual manual filings have been mixed with increases and decreases in 2000. These two findings could indicate at least the end of softer markets, however, they do not necessarily point to a hardening market.

In summary, the evidence available on market structure, conduct and performance indicates that there is a reasonable degree of competition in the workers' compensation insurance market.

APPENDIX

Section 2409 of Public Act 8 of 1982

Sec. 2409. (1) The Commissioner shall hold a public hearing and shall issue a tentative report detailing the state of competition in the workers' compensation insurance market on a statewide basis and delineating specific classifications, kinds or types of insurance, if any, where competition does not exist not later than January 15, 1984 and each year thereafter. The report shall be based on relevant economic tests, including but not limited to those in subsection (3). The findings in the report shall not be based on any single measure of competition, but appropriate weight shall be given to all measures of competition. The report shall include a certification of whether or not competition exists. Any person who disagrees with the report and findings of the commissioner may request a contested hearing pursuant to Act No. 306 of the Public Acts of 1969, as amended, being sections 24.201 to 24.315 of the Michigan Compiled Laws, not later than 60 days after issuance of the tentative report.

- (2) Not later than August 1, 1984 and each year thereafter, the commissioner shall issue a final report which shall include a final certification of whether or not competition exists in the workers' compensation insurance market. The final report and certification shall be supported by substantial evidence.
- (3) All of the following shall be considered by the commissioner for purposes of subsection (1) and (2):
- (a) The extent to which any insurer controls the workers' compensation insurance market, or any portion thereof. With respect to competition on a statewide basis, an insurer shall not be considered to control the workers' compensation insurance market unless it has more than a 15 percent market share. This subdivision shall not apply to the State Accident Fund.
- (b) Whether the total number of companies writing workers' compensation insurance in state is sufficient to provide multiple options to employers.
- (c) The disparity among workers' compensation insurance rates and classifications to the extent that such classification result in rate differentials.
- (d) The availability of workers' compensation insurance to employers in all geographic areas and all types of business.
 - (e) The residual market share.
 - (f) The overall rate level which is not excessive, inadequate or unfairly discriminatory.
 - (g) Any other factors the commissioner considers relevant.

- (4) The reports and certifications required under subsections (1 and (2 shall be forwarded to the governor, the clerk of the house, the secretary of the senate, all the members of the house of representatives committees on insurance and labor, and all the members of the senate committees on commerce and labor and retirement.
- (5) Not later than 90 days after receipt of the final report and final certification, the legislature, by concurrent resolution, shall approve or disapprove the certification by a majority roll-call vote in each house. If the certification is approved, the commissioner shall proceed under section 2409a.

With the passage of Public Acts 195 through 201 of 1993, to be effective with the sale of the State Accident Fund, Section 2409(3)(a) is amended to read:

(a) The extent to which any insurer controls all or a portion of the worker's compensation insurance market. With respect to competition on a statewide basis, an insurer shall not be considered to control the worker's compensation insurance market unless it has more than a 15% market share. In making a determination under this subdivision, the commissioner shall use all insurers in this state, including self-insurers, group self-insurers as defined in chapter 65, and insurers writing risks under the placement facility created in chapter 23 as a base for calculating market share.

CERTIFICATION OF THE STATE OF

COMPETITION IN THE

WORKERS' COMPENSATION INSURANCE MARKET

I hereby certify that, based on the results of the economic tests specified in MCLA 500.2409, a reasonable degree of competition exists at this time with respect to the Michigan workers' compensation insurance market.

Frank M. Fitzgerald

Commissioner of Insurance

UM. Folygerald

Date: January 13, 2000